

1987-89 Catalog

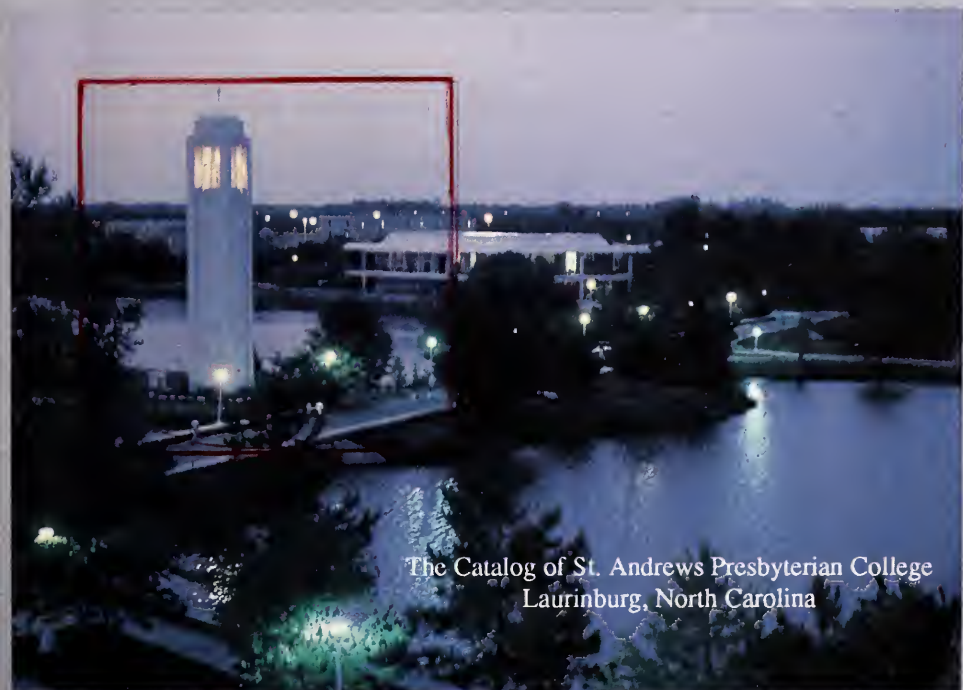


St.
Andrews
Presbyterian College
Laurinburg, North Carolina



St. Andrews Presbyterian College

1987-89 Catalog



The Catalog of St. Andrews Presbyterian College
Laurinburg, North Carolina

St. Andrews Presbyterian College is an affirmative action institution. As such, it does not discriminate on the basis of race, sex, creed, national origin or physical handicap in the administration of its educational policies, admissions policies, scholarship and loan programs, employment practices or other college administrated programs.

Confidentiality of Student Records

Pursuant to the Family Educational Rights and Privacy Act of 1974, as amended, in general, personally identifiable information can be disclosed to persons outside the college only with the written consent of the student or alumnus involved. A statement is available setting forth the specific college policy concerning a) disclosure of information to persons outside the college, b) disclosure of information to persons within the college, c) permitting students to inspect and review records, d) providing students with the opportunity to seek the collection of their records. The complete confidentiality statement is available in the Saltire.

The college reserves the right to make changes in particular curricular requirements and offerings, in regulations and in fees whenever such changes are deemed essential. College catalogs and bulletins are prepared to furnish prospective students and other interested persons with information about the institution. Announcements contained in such printed materials are subject to change and may not be regarded as legally binding obligations.

Table of Contents

1 Introduction/2

Aim/2
Heritage/3
Accreditation/3
Location/4
Campus/4
Faculty/6

2 Academic Program/8

International Program/11

3 Student Life/15

4 Admissions/26

5 Financial Information/29

Fees/29
Financial Aid/33
Applying for Aid/34
Scholarships/35

6 Academic Regulations/37

Academic Honors

7 Curriculum/52

SAGE/52
Humanities and Fine Arts/56
Mathematics, Natural and Health
Sciences/106
Social and Behavioral Sciences/140

Faculty/184

Administration/192

Trustees/195

Map/197

Index/198

Correspondence Direc- tory/199



St. Andrews Presbyterian College Calendar 1987-88

Approved by faculty
May 5, 1987

Fall Term

September 5-6
September 7
September 8
September 15
September 15

September 29
October 6

October 9
October 14
October 15
October 20

October 22
November 3

November 4
November 16

November 16
November 17
November 24
November 30

December 7
December 8, 9, 10
11, 12

December 12
December 12
December 15

Saturday-Sunday
Monday

Tuesday (8 a.m.)
Tuesday (5 p.m.)
Tuesday (5 p.m.)

Tuesday (5 p.m.)
Tuesday (5 p.m.)

Friday (5:35 p.m.)
Wednesday (8 a.m.)
Thursday
Tuesday

Thursday (5 p.m.)
Tuesday

Wednesday (5 p.m.)
Monday (5 p.m.)

Monday (5 p.m.)
Tuesday
Tuesday (5:35 p.m.)
Monday (8 a.m.)
Monday
Tuesday, Wednesday,
Thursday, Friday, Saturday
Saturday (5 p.m.)
Saturday (8 p.m.)
Tuesday (12 noon)

New student orientation
Fall term registration
Classes begin
Last day to add a course for fall term
Last day to drop a course
without a grade of "W"
"Early warning" letters due
Spring term and summer grades
of "T" become "F" if not removed
Fall recess begins
Fall recess ends
Registration for winter term courses
Advanced registration for winter
term courses
Mid-term grades due
First day to change grading option
for a course
Last day to drop a course
Last day to change to pass-fail
grading option
"Early warning" letters due
Advanced registration for spring
Thanksgiving recess begins
Thanksgiving recess ends
Last class day of fall term
Fall term final examination
Fall term ends
Residence halls close
Fall term grades due

Winter Term

January 11	Monday (8 a.m.)	Winter term begins
January 12	Tuesday (5 p.m.)	Last day to add a course for winter term
February 4	Thursday	Winter term ends
February 12	Friday (5 p.m.)	Fall term grades of "I" become "F" if not removed
February 12	Friday (4 p.m.)	Winter term grades due

Spring Term

February 8	Monday	Orientation of new students
February 8	Monday	Spring term registration
February 9	Tuesday (8 a.m.)	Classes begin
February 16	Tuesday (5 p.m.)	Last day to add a course
February 16	Tuesday (5 p.m.)	Last day to drop a course without a grade of "W"
March 1	Monday (5 p.m.)	"Early warning" letters due
March 8	Tuesday (5 p.m.)	Winter term grades of "I" become "F" if not removed
March 17	Thursday (5 p.m.)	Mid-term grades due
March 30	Wednesday (5 p.m.)	Last day to drop a course
April 1	Friday (5:35 p.m.)	Spring recess begins
April 1	Friday (GOOD FRIDAY)	Abbreviated class schedule
April 11	Monday (8 a.m.)	Spring recess ends
April 12	Tuesday (8:30 a.m.)	First day to change grading option for a course
April 18	Monday (5 p.m.)	"Early warning" letters due
April 19	Tuesday	Advanced registration for fall term 1988
April 26	Tuesday (5 p.m.)	Last day to change grading option for a course
May 10	Tuesday	Last class day of spring term
May 11	Wednesday	Study day (no classes)
May 11	Wednesday (12 noon)	Senior grades due
May 12, 13, 14, 16, 17	Thursday, Friday, Saturday	Spring term final examination
May 15	Monday, Tuesday	
May 15	Sunday	Commencement
May 17	Tuesday (5 p.m.)	Spring term ends
May 17	Tuesday (8 p.m.)	Residence halls close for non-graduates
May 19	Thursday (12 noon)	All spring grades due

Summer Term

June 27	Monday (8 a.m.)	Summer session begins
July 29	Friday (5:30 p.m.)	Summer session ends

St Andrews Presbyterian College
Tentative Calendar 1988-89

Revised 4/20/87

September 3-4	Saturday-Sunday	New student orientation
September 5	Monday	Fall term registration
September 6	Tuesday (8 a.m.)	Classes begin
September 13	Tuesday (5 p.m.)	Last day to add a course for fall term
September 13	Tuesday (5 p.m.)	Last day to drop a course without a grade of "W"
October 4	Tuesday (5 p.m.)	Spring term and summer grades of "I" become "F" if not removed
October 6	Thursday	Registration for off-campus winter term courses
October 7	Friday (5:35 p.m.)	Fall recess begins
October 12	Wednesday	Fall recess ends
October 18	Tuesday	Advanced registration for winter term courses
October 19	Wednesday (5 p.m.)	Mid-term grades due
November 1	Tuesday	First day to change grading option for a course
November 2	Wednesday (5 p.m.)	Last day to drop a course
November 14	Monday (5 p.m.)	Last day to change to pass-fail grading option
November 14	Monday (5 p.m.)	"Early warning" letters due
November 15	Tuesday	Advanced registration for spring
November 22	Tuesday (5:35 p.m.)	Thanksgiving recess begins
November 28	Monday (8 a.m.)	Thanksgiving recess ends
December 5	Monday	Last class day of fall term
December 6, 7, 8, 9, 10	Tuesday, Wednesday, Thursday, Friday, Saturday	Fall term final examinations
December 10	Saturday (5 p.m.)	Fall term ends
December 10	Saturday (8 p.m.)	Residence halls close
December 13	Tuesday	Fall term grades due

Winter Term

January 9	Monday (8 a.m.)	Winter term begins
January 10	Tuesday (5 p.m.)	Last day to add a course for winter term
February 2	Thursday	Winter term ends
February 10	Friday (5 p.m.)	Fall term grades of "I" become "F" if not removed
February 10	Friday (4 p.m.)	Winter term grades due

Spring Term

February 6	Monday	Orientation of new students
February 6	Monday	Spring term registration
February 7	Tuesday (8 a.m.)	Classes begin
February 14	Tuesday (5 p.m.)	Last day to add a course
February 14	Tuesday (5 p.m.)	Last day to drop a course without a grade of "W"
March 7	Tuesday (5 p.m.)	Winter term grades of "I" become "F" if not removed
March 16	Thursday (5 p.m.)	Mid-term grades due
March 17	Friday (5:35 p.m.)	Spring recess begins
March 27	Monday (8 a.m.)	Spring recess ends
April 1	Friday	Abbreviated class schedule
April 6	Thursday (5 p.m.)	Last day to drop a course
April 11	Tuesday (8 a.m.)	First day to change grading option for a course
April 17	Monday (5 p.m.)	"Early warning" letters due
April 18	Tuesday	Advanced registration for fall term 1989
April 25	Tuesday (5 p.m.)	Last day to change grading option for a course
May 9	Tuesday	Last day of spring term

May 10	Wednesday	Study day (no classes)
May 10	Wednesday (12 noon)	Senior grades due
May 11, 12, 13, 15, 16	Thursday, Friday, Saturday	Spring term final examinations
May 14	Monday, Tuesday	
May 16	Sunday	Commencement
May 16	Tuesday (5 p.m.)	Spring term ends
May 16	Tuesday (8 p.m.)	Residence halls close for non-graduates
May 18	Thursday (12 noon)	All spring grades due

Summer Term

June 26	Monday (8 a.m.)	Summer session begins
June 28	Friday (5:30 p.m.)	Summer session ends







1

Introduction

St. Andrews is a four-year, co-educational residential college located on an expansive, lakeside campus in Laurinburg, North Carolina. St. Andrews affirms the liberal arts heritage of critical inquiry and the continuing relevance in higher education of the Christian concerns for truth, justice and personal worth.

St. Andrews' approximately 800 undergraduates hail from 24 states and territories and 10 foreign countries. Together they create a cosmopolitan atmosphere in a community that challenges them to do their best intellectually, creatively and in service to others.

Helping students to meet these challenges are a dedicated staff and a superb faculty—some 75 percent of whom hold doctorate degrees—whose principal commitment is to teaching. St. Andrews is small by design, to retain the close, informal atmosphere of the community, yet still offers academic, cultural and social opportunities unsurpassed by larger colleges.

The St. Andrews academic program is innovative in its approach, yet firmly rooted in the liberal arts tradition. The St. Andrews General Education (SAGE) program, which integrates a core curriculum and breadth courses with a student's major concentration, has been used as a model by national education associations.

Aim

The college expects students to develop the following characteristics and attitudes:

- A disciplined and inquiring mind enabling clear thinking and effective communications.
- An informed awareness of major achievements in our culture and other cultures
- An increased sensitivity to human needs and concern for social justice
- A growing refinement of sensibility and taste in the arts and literature
- A clear understanding of the role of the sciences in creating a humane environment for the world
- A deepening personal faith which results in responsible living
- An intelligent concern for democratic values in personal, national and international relations
- A maturing desire for continued intellectual, moral and spiritual growth beyond the college years.
- A dedication to physical and emotional health and vitality
- A clear sense of vocation for stewardship of life.

Heritage

St. Andrews Presbyterian College was established in 1958 through a merger of two proud colleges with long and respected traditions, Flora Macdonald College (est. 1896) and Presbyterian Junior College (est. 1928).

In the early 1950s, Presbyterians of the state, unable to sufficiently fund the state's many Presbyterian colleges, obtained a grant from the Ford Foundation to survey higher education in the Synod of North Carolina. As a result of that study, the Synod decided in 1955 to merge several colleges into one new college at a new site.

Another grant enabled the Synod to plan a new college of high quality and Christian purpose, and with contemporary style and design. In 1960, the new college was named St. Andrews Presbyterian College to mark its Presbyterian heritage and to identify it with the University of St. Andrews, a leader of Christian education in Scotland.

Since its opening in 1961, St. Andrews has distinguished itself as a pioneer in innovative Christian higher education. With its interdisciplinary emphases in the humanities and sciences, contemporary and award-winning campus design, openness to the physically disabled and commitment to value-oriented learning for the future, St. Andrews has become a nationally-recognized new college with a significant history.

Accreditation

St. Andrews is accredited by the Southern Association of Colleges and Schools.

The college is a member of the Association of American Colleges, the North Carolina Association of Colleges and Universities, the North Carolina Association of Independent Colleges and Universities, the Association of Presbyterian Colleges and the Council of Independent Colleges. The college's women graduates qualify for membership in the American Association of University Women.

Location

St. Andrews lies on the south side of Laurinburg, an attractive community of 13,000 people. Twice an "All-America" city and the county seat of Scotland County, Laurinburg's location at the edge of the famous Sandhills region offers students a pleasant setting for study and recreation. Laurinburg's climate is similar to that in nearby winter resorts. Southern Pines and Pinehurst, and the area is noted for the beauty of its azaleas, camelias, dogwoods and long leaf pines.

Laurinburg is centrally located at the junction of U.S. routes 401, 15, 501 and 74, about 100 miles from Charlotte, Raleigh, Greensboro, Wilmington and Myrtle Beach. The college is served by the Seaboard Coach Line and Amtrak through nearby Hamlet, Southern Pines and Fayetteville. Piedmont and American Airlines in Fayetteville provide air transportation.

Campus

One of the chief attractions of the college is its beautiful contemporary-style campus situated on over 600 acres of rolling land. Leading educational consultants worked with expert architects and landscape designers to translate Christian educational philosophy into modern construction. The design of the campus, which is virtually barrier-free to accommodate those with physical limitation, won its architects a first-place citation in national competition.

Most of the campus buildings are grouped on opposite banks of the 70-acre Lake Ansley C. Moore, named in honor of the College's first president. Major academic buildings—the library, teaching auditorium, classrooms, laboratories and studios—are on the south side. Facilities for student housing, recreation, athletics and recreational activities are located on the north side. A causewalk restricted to pedestrians links the two areas. All buildings are air-conditioned and barrier-free, and many are equipped to provide audio-visual instruction.

The DeTamble Library is a handsome three-story building at lakeside. Gifts for its construction came from many sources, the largest from the First Presbyterian Church of Winston-Salem out of the F.J. DeTamble legacy, with others from the Z. Smith Reynolds and Mary Reynolds Babcock Foundations.

The library houses more than 100,000 volumes and 18,000 microforms. Over 450 periodicals and newspapers support the intellectual efforts of students and faculty. The library is open more than 80 hours per week, and students have free access to the stacks. A variety of reading and study settings are available.

Special library holdings include a music collection of nearly 1,600 scores and more than 2,260 disc recordings with listening facilities and the Scottish and rare book collections. The library is a selective depository for U.S. government documents.

Avinger Auditorium, made possible by a gift from Mrs. George F. Avinger in memory of her husband, connects the science center and the Liberal Arts Building. Designed as a teaching auditorium, it seats up to 400 people.

The Liberal Arts Building houses 18 lecture classrooms, six art studios for painting, sculpture, ceramics and photography, a bronze foundry, a 200-seat theatre, a modern computer center, a faculty lounge, two enclosed courtyards and administrative offices.

Morgan-Jones Science Center, including the John Blue Laboratory, is designed to provide facilities for the College's unique science program. On the upper level is the 255X80 foot multi-disciplinary laboratory, the instrumentation room containing a nuclear magnetic resonance spectrometer, two electron microscopes and other sophisticated equipment, facilities for radiation experimentation, four large growth chambers, a self-service stock room, shops for woodworking, metal working and glass-blowing, and four seminar rooms. The lower level, facing the lake, contains 14 large faculty teaching offices designed for individual and small group instruction, six seminar rooms and new experimental psychology laboratories. The building honors two founding trustees of St. Andrews, the late Edwin Morgan and the late Halbert M. Jones.

The Vardell Building houses faculty offices, a choral auditorium, a theatre workshop, music studios and practice rooms, the music library and listening room and an art gallery.

The Katherine McKay Belk Tower, the campus' centerpiece, is a 16-bell carillon on Chapel Island given by former trustee Thomas M. Belk in honor of his wife who is also a former trustee.

Pate Hall Conference Center provides meeting and housing facilities for use by off-campus groups within the context of the college community. The center was named in honor of Mr. and Mrs. Edwin Pate of Laurinburg, longtime contributors to the college.

The Belk College Center overlooks the lake on the residential side of the campus. The hub of campus social life, it houses the Carol Grotnes Belk Main Lounge, student government offices, a post office, a student book store, student activity offices, the college cafeteria, student life offices, and a snack bar. The building honors the memory of William Henry Belk of Charlotte.

Seven dormitories, single and multi-story to accommodate 96 and 114 students to a building, are arranged in suites, small group units housing 12 to 16 students each. These units include bedrooms, bath and a lounge. Laundry facilities are located in each dormitory and all dorms have reception areas, common lounges and residence director apartments. Several dormitories have guest rooms.

The Physical Education Center houses Harris Courts, the multi-purpose gymnasium which seats 1,200. Olympic-size O'Herron swimming pool is available year-round, as are the bowling alleys, racquetball and handball courts, a game room, and wrestling and weight rooms. Other facilities include physical education staff offices provided by the McNair family, three classrooms, spacious locker rooms and accommodations for visiting teams. Outside athletic facilities include an all-weather track, Clark baseball field, lighted all-weather tennis courts, soccer, softball and hockey fields. A jogging trail, riding stables, a kennel, and a golf practice area with a par-three course of seven holes.

Burris Rehabilitation Center, made possible by a gift from Jack B. Burris Sr. of High Point, N.C., is a 9,000 square foot facility which provides the central location for the health and rehabilitation services program. This facility includes a modern health services department, consisting of a suite of medical offices and rooms for short-term, inpatient care.

The Highland Hall section of Burris Center is a 22-room facility, designed to provide support and rehabilitation services to orthopedically disabled students. The innovative design of Highland Hall creates a positive environment, considered among the finest in the nation.

Rehabilitation services, the third unit based in Burris Center, includes offices, specialized support rooms and a lounge.

Farrago. Located on the edge of the campus near the residence halls, Farrago provides an informal setting for student parties, small performances, pool, video games, and for watching special events on the large-screen television.

The Faculty

St. Andrews' faculty is its most important learning resource. The faculty is a highly qualified group of men and women dedicated to the fullest intellectual and personal growth of students. For its faculty the college seeks scholar-teachers with exceptional preparation in academic disciplines with interdisciplinary interests and competence and with a deep commitment to undergraduate teaching.

The present faculty of St. Andrews represents a wide array of educational backgrounds and experience. Fifty-one members of the 1985-86 faculty have earned degrees from more than 80 colleges and universities located in some 29 states. About 75 percent hold earned doctorates. More than half the faculty has traveled and studied extensively in Africa, Asia, Europe and Latin America.

St. Andrews' faculty is not content to rest on academic laurels. They consider continuing professional growth and scholarly productivity essential for maintaining intellectual vitality and creative teaching. In recent years, members of the faculty have received awards for which there is national competition, including fellowships from the National Endowment of the Humanities, the National Science Foundation and the Guggenheim Fellowship. Faculty members serve as Danforth Associates and as consultants to other colleges in the area of interdisciplinary curriculum development, science education and facilities and intercultural studies.

Although professional competency and achievements are important to the faculty, excellence in teaching has the highest priority at St. Andrews, where personal relationships with students are valued. Academic discipline tempered by friendship and good humor is the faculty style. A faculty-student ratio of 1:13 and an average faculty age of 40 years, encourage openness in teaching and learning.







2

Academic Program

The St. Andrews academic program prepares students for graduate and professional schools or to enter directly into fields such as business, teaching, management and public service.

Degrees

St. Andrews offers courses leading to bachelor of arts and bachelor of science degrees.

The bachelor of arts degree is offered in allied health, art, biology, business and economics, chemical physics, chemistry, education, English, French, history, literature, mass communications, mathematics, mathematics with an emphasis in computer science, modern language, music, politics, philosophy, physical education, psychology, religion and theatre.

The bachelor of science degree is offered for majors in biology, chemistry, chemical physics and psychology.

The bachelor of science degree with a major in natural science and mathematics is available to students who complete the dual degree program of study in engineering between St. Andrews Presbyterian College and the Georgia Institute of Technology.

The bachelor of science degree and medical technology certification are normally conferred after three years of study at St. Andrews and one year of training at an accredited college of medical technology.

Students have the option of developing a thematic major beyond the disciplinary and interdisciplinary majors offered. See *Academic Regulations* section for details about thematic contract majors.

St. Andrews General Education

(SAGE) Program

St. Andrews seeks to give students a traditional, liberal education that will equip them to successfully live, work and grow in a constantly changing world.

To fulfill the college's aim that all students develop a disciplined mind and breadth of intellect through their education at St. Andrews, all students must complete SAGE courses in addition to breadth and major courses.

The goals of SAGE are to develop in each St. Andrews student competence in the following areas: communication, cultural analysis, esthetic and personal and social responsibility.

Students ordinarily enroll in SAGE courses every fall and spring during their freshman and sophomore years, fall term of their junior year and spring term of their senior year at St. Andrews.

Breadth Courses

To acquire the breadth in educational experience which characterizes St. Andrews' view of liberal learning and to build a broad foundation for specialization, all students must complete five breadth courses.

Academic calendar

St. Andrews follows an academic calendar popularly known as the 4-1-4 program. The academic year is divided into three terms—two four-month terms, fall and spring, separated by a one-month January winter term.

Students ordinarily take 11-16 credits during the fall and spring terms and three credits in the winter term. The fall term begins early in September and ends with Christmas break, the winter term extends throughout January, and the spring term begins in February and ends in late May.

Winter Term

St. Andrews' four-week winter term in January provides a time for experimentation, innovation and variety in learning experiences, and presents subject matter and areas

of study not offered in the same form in the fall and spring terms. The winter term offers opportunities to explore new interests, to combine theory and experience and to pursue work that lends itself to intensive application.

Winter term courses are required for graduation and are as important as regular term courses. A winter term course occupies a student's full academic time for the month. This means that students are expected to spend as much time on the one course during this short term as they are expected to spend on four courses during a given month in the fall or spring terms.

More than 40 off-campus courses are approved for the winter term each year and provide opportunities for in-depth study of a particular subject on the St. Andrews campus, elsewhere in this country, or at locations throughout Europe, Asia, Africa or Latin America.

Students in the past several years have studied theatre in London, archaeology in Mexico, marine biology in Venezuela, folk music in Scotland, and the secular city in New York. Others have had internships in social work and special education through local and regional agencies.

Students have also studied the stock market and investments, African fiction, human genetics, the future, psychopharmacology, transformational grammar and contemporary British fiction. Students may also propose independent study projects for the term.

A student must take one winter term course for each full academic year in attendance at St. Andrews. A major program may require one winter term course. A student may choose no more than two winter term courses within the major.

St. Andrews welcomes students in good standing at other accredited colleges and universities to its winter term. Although it has no formal exchange agreements with other institutions, St. Andrews is willing to waive tuition for students from other institu-



tions which agree to do the same for St. Andrews students. Students interested in attending the St. Andrews winter term may obtain application and registration forms from the coordinator of the winter term.

International Programs

St. Andrews is dedicated to international experiences for all of its students. Approximately 45 percent of the student body will have had at least one international experience during the years of study at the college. Opportunities for such educational/cultural experiences in other lands are offered in four different types of categories:

Short-term courses

The college offers numerous international courses during the winter term and during the weeks immediately following the conclusion of spring term. The courses carry three credits and are directed by a member of the faculty who accompanies the students. The courses run from three to five weeks. An average of 75 students participate in these courses, studying in Greece, India, Switzerland, England, Scotland, Wales, Venezuela, Mexico and British Columbia.

St. Andrews Residential Courses Abroad

Brunnenburg Castle

Since 1983 the college has offered a full fall term in the Tyrolian Alps of northern Italy. Ten to 13 rising juniors and seniors are selected to participate in that extraordinary program, offering challenging yet flexible opportunities for students to experience European culture while studying a variety of academic subjects. Courses at the castle are taught by one faculty member from St. Andrews and by two other professors, one a literary scholar and the other an anthropologist, who live at the castle. The term begins in mid-August and concludes in late November.

Program content is designed to offer a challenging, yet flexible opportunity for students to experience European culture while studying a variety of academic subjects. Conversational study of German and Italian is required to allow greater interaction with the local community.

Chinese Language and Culture: Beijing, China

Beginning in January, 1988, St. Andrews will have a semester in Beijing for 10 to 14 St. Andrews students and up to six students from other colleges and universities throughout the southeast. Participants will engage in intensive Chinese language study and benefit from broad and varied cultural engagement with China and her people.

The group will be housed at the Beijing Normal College of Foreign Languages in the heart of the capital city. There are numerous trips and excursions planned throughout the term. Teachers for the course will be Chinese language scholars and the residency is under the direction of Americans who are Chinese experts. A member of the

faculty/staff from St. Andrews will also be in residence for the entire period.

Students who have completed at least 30 course credits with a GPA of 3.0 will be eligible to apply for admission to the China program.

Internships

Whenever and wherever possible, students are encouraged to design and secure international internships. Though individually crafted, an interested student will find encouragement, assistance and support from the faculty and staff in securing such opportunities.

Junior Year Abroad Program

St. Andrews has formal exchange agreements with the University of Stirling, Scotland and with Kansai Gaidai University in Japan. The college is also a cooperating member of the Central College Consortium which sponsors semester and year-long study programs in Wales, England, Spain, Austria and in the Netherlands.

In addition, the college places students in the Aix-En-Provence language/cultural studies program in the south of France and has collaborative relationships with Mansfield College, Oxford and with the University of St. Andrew, Scotland. On average, there are between six and ten St. Andrews students who participate in these kinds of institutional international study experiences each year.

Students planning to participate in these study abroad opportunities must be at least rising juniors, have a declared major and hold a GPA of a minimum of 3.0. The international program office assists students in preparing applications, securing passports and visas and often serves as advocate in securing financial assistance.

Pre-Professional Programs

St. Andrews offers programs which prepare students for professional studies in such fields as medicine, dentistry, veterinary medicine, law, theology, physical therapy and engineering. Of course, St. Andrews' liberal arts programs prepare students to enter virtually any other professional program at the graduate or undergraduate level.

St. Andrews/Georgia Tech Engineering Program

The dual degree program of study in engineering between St. Andrews Presbyterian College and the Georgia Institute of Technology establishes a plan whereby an undergraduate student will attend St. Andrews for approximately three academic years and the Georgia Institute of Technology for approximately two academic years. After completing the academic requirements of both cooperating institutions, the student shall be awarded a bachelor's degree from St. Andrews and one of several designated bachelor's degrees in engineering awarded by the Georgia Institute of Technology.

The dual degree student's total program of study at St. Andrews shall be at least 95 credits. Within the 95 credits must be included all required core, breadth and major

requirements as contracted. Course work in the major begins in the freshman year. Core and breadth requirements are those listed in the appropriate St. Andrews catalog at the time of admission of the student to St. Andrews. The student will not be considered for admission to Georgia Institute of Technology with full third-year standing until this requirement is met.

St. Andrews/University of Georgia Dual Degree (Bachelor/Masters) in Accounting Program

The dual degree program between St. Andrews and the University of Georgia's School of Accounting is a unique five year program leading to the bachelor's degree from St. Andrews and a master's degree in accountancy from the University of Georgia. This is the only dual degree program of this type emphasizing accounting in the United States. St. Andrews is especially proud to be a partner in this pioneer program with one of the top-ranked schools of accounting in the country. The program allows a student to attend St. Andrews for approximately three academic years and the University of Georgia for approximately two academic years.

Acceptance in the dual degree program does require adherence to and satisfactory completion of a specified schedule of courses and other requirements are available from the accounting dual degree advisor in the business administration/economics program.

Internships

Through experimental learning, St. Andrews makes it possible for students to apply classroom education to the demands of a work setting. At St. Andrews, one type of experimental learning is the academic internship, an exciting and challenging part of a St. Andrews education recognized by the faculty for its learning value.

Academic internships are available in every program at St. Andrews for any student possessing the necessary academic and personal background to accomplish the stated internship goals. In recent years, hundreds of students in all disciplines have enrolled for internships.

Internships can occur at any time of year and in almost any geographical location. In the past, St. Andrews interns have worked in the following: city and county government, national congressional offices, the Smithsonian Institution, Indian Law Center, National Archives, Environmental Protection Agency, ABC's "Good Morning America", NASA, hospitals, law offices, social services, churches, radio and television stations, at newspapers, art museums and more.

Summer Term

Attending summer school at St. Andrews is an excellent way for students to experience the purpose of the college in a short time span at a reduced tuition cost. St. Andrews operates one summer session and offers a variety of courses in almost all majors. In addition to the regular college courses, many special programs are offered for

teachers, high school students, and Laurinburg area residents. For further information, contact the director of the summer school.

Continuing Adult Education

Each term, St. Andrews offers a variety of courses in the evening to serve adults in the Laurinburg community. The courses are usually in business and economics and carry full college credit.

Certificate in Business Management (CBM) Program

The St. Andrews Certificate in Business Management is a program offered for men and women who want to prepare for career advancement and gain greater job satisfaction. The CBM program is designed for special students to improve their business skills and management competencies.

Certificate candidates must satisfactorily complete a total of seven courses to earn the certificate in business management. Two courses are required of all program students, and five additional courses may be selected from others offered. All courses are regular St. Andrews courses which carry full credit and have the same work and performance requirements as do regular degree courses. For information regarding CBM admission and requirements, contact the chairperson of the business and economics program.

Continuing Education Unit (CEU) Courses

Each summer St. Andrews provides a variety of courses for individual and institutional CEU credit. These courses are primarily designed for public school teachers and can be applied to teaching reaccreditation in North Carolina.

Senior Citizen Audit Program

Under the terms of this program, local citizens ages 55 and over may enroll in most regular courses at St. Andrews at a reduced rate per course. During the fall and spring terms there are usually over 50 courses from which to select.

3

Student Life

Students' activities beyond the classroom enhance their intellectual, physical and cultural growth. Opportunities abound at St. Andrews for students to enrich their education through extracurricular activities, residence hall life, social and recreational activities, civic involvement and religious endeavors.

Housing

As a residential, liberal arts college, St. Andrews makes concerted efforts to promote effective student learning and development beyond the traditional academic experience and into the daily living environment. Commensurate with this, all students are required to live in the residence halls on campus when space is available unless they are living with parent, guardian, or spouse. Special requests for permission to reside off-campus may be submitted to the student life office and will be handled strictly on an individual basis.

The residential buildings are comprised of seven residence halls: four multi-story, single sex and three single-story, coed. Each hall has a large main lounge with





television and either seven or eight suites. Each suite has six or seven rooms, a phone for local and campus calls, a small common lounge and bath. Several pay phones are located within the halls for long distance calls.

Live-in residence directors are both educators and managers who advise and counsel residents and hall councils, assist with problem solving, make appropriate referrals, coordinate programs in their respective halls of a cultural, social, academic, judicial or recreational nature, and associate with the residential community in maintaining an academic atmosphere, the physical facilities and respect for college policies and regulations.

The dean of students administers the residence hall programs and facilities with the assistance of the director of housing and the assistant dean of students. The director of housing communicates with new students concerning roommates, room assignments and policies. Residence hall regulations and expectations concerning care of property, maintenance, safety and social conduct are published in the *Saltire*, the student handbook which is distributed to all students by the student association.

Food Service

The Belk Center Cafeteria serves three daily meals to students throughout the regular academic year. In addition to traditional hot meals, cafeteria fare includes a multi-item soup and salad bar, a sandwich bar and continental breakfast. Many students enjoy eating their meals at lakeside on the cafeteria terrace, while others prefer the livelier atmosphere inside where the cafeteria stereo system plays popular music.

Students living off-campus may buy a long-term meal ticket from the college food service. A snack bar is operated in the Liberal Arts Building during specified hours.





Student Activities

Social Events

St. Andrews students traditionally have been very sociable; they enjoy movies, concerts, dances, parties, music, plays, pig pickin's, games and coffeehouse entertainment.

Besides the social events sponsored by the residence halls, other campus organizations fill the college calendar with activities. Each year the college union board (CUB) plans dances, concerts, leadership

development workshops and other entertainment.

The College Christian Union (CCU) also sponsors events ranging from retreats to fund-raising festivals and other events for favorite charities.

Halloween, Christmas and Valentine's dance parties take place on an annual basis, and the most popular of all events—Extravaganza, a beach party by the lake—is held every spring.

Athletics

Many students participate in the college's intramural program throughout the year. Intramural competition is sponsored in basketball, soccer, bowling, billiards, tennis, table tennis, racquetball and volleyball for men's and women's teams. Coed teams compete in volleyball, racquetball, badminton and riding.

Intercollegiate Athletics

Both men's and women's teams at St. Andrews are members of the NCAA Division III and the Dixie Intercollegiate Athletic Conference. The intercollegiate program for men's field teams in soccer, cross-country, golf, basketball, track and tennis. Women's teams compete in volleyball, basketball, softball and tennis. Both men and women compete on the college's equitation team, which was ranked second nationally in stock seat competition in 1986 and third in huntseat at the ANRC Nationals.

St. Andrews has been awarded the President's Cup by the Dixie Conference for amassing the highest number of points in the conference several times in the last six years. The nationally ranked men's basketball team captured conference honors in 1981, 1982 and 1983 and earned berths in the NCAA Regionals those seasons. The 1982 women's basketball squad, also nationally ranked, was the Dixie Conference runner-up and co-conference champion and earned a bid to the NCAA Regionals. The 1985 women's volleyball team won the conference tournament and was nationally ranked.

The athletic program at St. Andrews is approved by and has full membership in the National Collegiate Athletic Association (NCAA), Division III. St. Andrews is a charter member of the Dixie Intercollegiate Athletic Conference (DIAC), in both men's and women's athletics. Effective with the 1988-89 academic year, St. Andrews will be

affiliated with District 26 of the National Association of Intercollegiate Athletics (NAIA) in both men's and women's athletics and will no longer be a member of the DIAC.

Cultural Opportunities

Under the combined sponsorship of St. Andrews and the Scotland Arts Council, the Scotland Concert Series offers fine arts performances throughout the year.

Recent headliners have included the Steel Bandits, Stephen Robinson (guitarist), A Community Christmas Extravaganza and The Marlowes (duo pianists).

The St. Andrews Writers Forum

The St. Andrews Writers Forum hosts weekly poetry readings for students, faculty and guests. During the 1987-88 academic year, the writers forum will feature Donald Keene, Soichi Furuta, Hiroaki Sato, Jonathan Williams and James Laughlin. Leading writers from across the nation and around the world are attracted to the campus by the highly acclaimed *St. Andrews Review* and the St. Andrews Press which publishes a minimum of four books a year. A student writing contest for seniors—the chapbook award—annually results in the publication of the winner's book of poetry.

Monday Night In the Arts

Monday evenings feature the works of visual artists and musical events. Works by St. Andrews art students and teachers are exhibited in the college's Vardell Gallery, which also displays guest shows and exhibitions. Musical recitals by special guests, faculty and students are held in the Hagan Choral Room in Vardell Hall. Works range from classical to jazz to contemporary music.



The St. Andrews Highland Players

The theatrical troupe offers performances and production opportunities from full main-stage theatre department productions to student showcases, and from dramatic readings to presentations of original works. All students are invited and encouraged to audition for these theatre events ranging from classical to modern, including selected musicals.

The Black Student Union

The Black Student Union sponsors a Black History Week each spring and other activities throughout the year.

Religious Life

St. Andrews is a church-related college, encouraged by the Presbyterian Church to pursue truth in rigorous and freeing ways. It is not sectarian but ecumenical in its outlook and in its commitments. The college pastor provides a ministry for both students and college personnel. Sunday evening vesper services are open to the college and the larger community. The College Christian Union, advised by the college pastor and an additional member of the faculty, supports and encourages Bible studies, seminars and study groups, sponsors retreats and service events ranging from a Muscular Dystrophy Association Festival, to Oxfam fasts; a Christmas party and Easter egg hunt for area children to blood drives and a South African support project.

Student Organizations

In addition to the CUB, the CCU and the Black Student Union, other college organizations and groups include:

The Cairn staff (student literary magazine)

The Lamp and Shield staff (yearbook)

The Lance (student newspaper)

Riding Club

St. Andrews Radio Club (broadcasters of WSAF)

The Art Guild

All organizations on campus are open to new students as well as upperclassmen. For instance, a freshman student may play a lead role in a major dramatic production or serve in leadership positions on the *Lance* or *Lamp and Shield* staffs.

Student Association

The St. Andrews Student Association enables students to assume roles of responsibility in campus life. Students implement their own activity programs, help to establish and enforce standards governing student life and assist in the development of college policy.

All St. Andrews students are members of the student association. The leadership of the association is composed of a cabinet, a senate and a judiciary system. Faculty and administration advisors serve with students and all matters involving students' welfare or interests are carefully considered for the general good.

Honor Code

The St. Andrews Honor Code is the cornerstone of student life at St. Andrews. Instituted by students in cooperation with the faculty, the honor code attests to a belief in an individual's responsibility for his or her own behavior.

All members of the community bear responsibility for maintaining high standards of conduct and are bound to deal with honor violations in a responsible way.

Each student affirms the following pledge:

"As a member of the honor community at St. Andrews, I pledge that I will not lie, cheat or steal, nor will I tolerate this conduct in any other member of the community. I will do all within my power to uphold the high standards of integrity and honor of St. Andrews."

Student Services

Career Planning and Placement

St. Andrews maintains a career planning and placement office to assist students and alumni in developing career plans through workshops, the core curriculum and personal counseling.

The office conducts an on-campus recruiting program that makes arrangements for seniors to meet with representatives of graduate and professional schools and with recruiters from business, industry and government to discuss career plans. Students must be registered with the office in order to participate. Registration early in the academic year is recommended (phone 276-3652 ext. 396)

SIGI (System of Interactive Guidance and Information), a computer-based aid to career decision-making, is available for all students. They are encouraged to utilize this service early in the academic career when decisions regarding career goals and majors are being faced.

The office posts jobs openings, schedules recruiting visits and maintains a library containing occupational information, educational directors, government and industrial recruiting literature, a wide selection of graduate school catalogs, resume guides, scholarship and other pertinent information.

Health and Rehabilitation Services

St. Andrews provides routine medical and first aid services to students at no extra charge, through the college health center. Nursing services are available 24-hours daily, seven days a week.

Overnight care in the college health center is provided when necessary for students living in the dormitories; however, cases needing special care or more than normal bedside attention are referred to a local hospital. The Scotland Memorial Hospital's new \$16 million facility is located on the north side of campus. Such care, special medications, and the services of physicians off-campus are financial responsibilities of students and their parents.

The college health center is part of the Burris Rehabilitation Center, which includes Highland Residence Hall for orthopedically disabled students. St. Andrews is fully accessible to the physically disabled. A wide range of services is available, including counseling, aides, rehabilitation nursing, physical therapy, adaptive physical education, driver education, wheelchair repair, transportation, placement and independent living experiences.

Career and Personal Counseling Service

Located on the St. Andrews campus, but operated by the Presbyterian Synod of North Carolina, the Career and Personal Counseling Center is known throughout North Carolina for its excellent career testing and counseling services. St. Andrews maintains a contractual agreement with the center so that its students may use the services free of charge. Its staff can help students deal with personal concerns, as well as educational and occupational decisions. An up-to-date resource library is maintained and contains extensive occupational/educational material. A computer-based aid to career decision making SIGI (System of Interactive Guidance and Information) is available in conjunction with counseling by a member of the center's professional staff.

Assistance is offered in such areas as:

- choice of college major
- planning one's career
- clarification of values and beliefs
- assessment of abilities
- personal adjustment/concerns
- choice of graduate school

Appointments are made on an individual basis and are highly confidential. Information and materials concerning a student will not be released to any institution or person without written permission of the client. Appointments are made by calling 276-3162 or extension 210.

Student Rules and Regulations

St. Andrews' rules and regulations and the student constitution and by-laws are included in the *Saltire*, the student handbook. A copy of the *Saltire* is given to all new students at orientation.

Drug and Alcohol Policy

The college cannot condone the abuse or illegal use of drugs and alcohol. Specific information regarding this matter may be found in the *Saltire*.

Automobiles

Students may keep automobiles or motorcycles on the campus. All motor vehicles must be registered and a St. Andrews parking permit clearly displayed as required by the *Saltire*. Decals may be purchased at the campus security office for a fee of \$10.

Special Note

Students are expected to conduct their lives responsibly and with due regard to the rights of other members of the St. Andrews community. When any student does not show convincing evidence of being in sympathy with the purposes, policies and procedures of St. Andrews, the college reserves the right to require the withdrawal of the student. This right is normally executed by the dean of students.





4

Admissions

The admissions office seeks to ensure that candidates for admission to St. Andrews possess the characteristics and skills necessary for success at St. Andrews. Prospective students and their parents are encouraged to visit the St. Andrews campus to discuss the college and its programs. The best time for such visits is generally during the regular academic year when the full complement of students, faculty and administrators is available to answer questions.

If possible, applicants should make appointments ahead of time with admissions representatives. The admissions office is located in the Liberal Arts Building and appointments may be made by writing to:

The Director of Admissions
St. Andrews Presbyterian College
Laurinburg, North Carolina 28352
or by calling (919) 276-3652.

Admissions Standards

St. Andrews serves the average to superior ability student. No specific grade average in high school or test score assures or denies admission to St. Andrews.

Each candidate's total record is evaluated by the college's faculty admissions committee, which approves or denies admission. In addition to previous academic record and test results, the committee considers class rank, subjects studied, proficiency in English, personal attributes and interests.

Advanced Placement

St. Andrews participates in both the advanced placement program and the college level examination program (CLEP) of the College Entrance Examination Board. Students achieving a score of three or higher on any advanced placement program exam will receive college credit in the subject at St. Andrews. Those scoring a two on any of these exams may be placed in an advanced course in the subject. Students may receive course credits for individual CLEP subject examinations by scoring at the 50th percentile or above. Students may receive sophomore standing (credit for nine courses) by scoring at the 50th percentile or above on the CLEP general examinations.

Advanced Credit for Freshmen

Freshmen who submit official transcripts of college-level credit earned in liberal arts courses in accredited colleges and universities during the summer or while enrolled in high school can expect credit for those courses at St. Andrews. If a college-level course is being used to satisfy high school graduation requirements, St. Andrews will consider granting college credit for these courses on an individual basis.

Transfer Students

St. Andrews welcomes transfer applicants and encourages them to visit the college campus. Transfer students from accredited colleges and universities are accepted into any class.

Graduates of junior colleges and two-year community colleges who have completed a liberal arts program and received the associate of arts degree can expect junior standing upon transferring to St. Andrews.

In addition to a regular application, transfer students are also required to submit official transcripts of their academic records and financial transcripts from each college or university attended.

Physically Disabled Applicants

Physically disabled applicants must have an interview with the director of health and rehabilitation services before they are considered for admission.

Foreign Students

Foreign students applying for admission to St. Andrews must submit official transcripts of all academic work attempted in the upper levels of their particular region, state or nation. Scores from either the test of English as a foreign language (TOEFL) or SAT/ACT and a financial certificate are also required.

Special Students

Special students are those not enrolled in a regular degree program at St. Andrews. Many senior citizens or students in the certificate of business management program are classified as special students.

How To Apply

Application forms may be requested from the admissions office. The completed application form should be sent to the admissions office with a \$20 nonrefundable application fee, an official high school transcript, transcripts from any college or university attended, and scores from either the Scholastic Aptitude Test (SAT) or the American College Testing (ACT) Assessment Program. When an applicant's credentials are completed, they are presented to the admission committee at its weekly meeting. Notice of the committee's decision is mailed on the following day.

Application Deadlines

The student interested in attending St. Andrews as a freshman should submit an application early in the senior year of high school. While there is no application deadline, places in next year's freshman class are filled throughout the year, but primarily in the fall and winter.

High School Placement

Recommended high school credits include four units of English, two or more units of a foreign language, three units of mathematics (two of algebra and one of plane geometry), three units of science, two units of social sciences and two or more units in electives. An applicant who has not completed all the recommended subjects will not be denied admission for this reason alone, provided course credits are reasonably similar for those recommended.



Early Admissions

St. Andrews offers an early admission option for academically strong students with the approval of their high school guidance counselors. A student may seek early admission to St. Andrews at the end of the junior year of high school.

5

Financial Information

St. Andrews is a private institution. Programs are supported by income from tuition and fees and by gifts from alumni, foundations, the Synod of North Carolina, Presbyterian Church U.S.A., individual churches and other friends of the College. Annual charges for attendance remain at the lowest possible level consistent with a quality education program and financially responsible management.

Reservation Deposit

Each student who plans to enroll is required to make a \$100 reservation deposit. It is credited toward first term fees and guarantees the student space in the College.

Entering freshmen and transfer students should send the \$100 deposit as soon as possible after receiving notice of admission to the college. Returning students pay a \$75 room deposit.

Basic Fees 1987-88

	Regular Year
Tuition	\$ 6,575.00
Room	
double	1,180.00
single	1,770.00
Board (seven days/week)	1,895.00

Additional expenses will be incurred for laundry, books and incidentals.

	1987 Summer Term
Tuition (per 3 or 4 credit course)	\$ 530.00
Room	
double	180.00
single	270.00
Board (seven days/week)	400.00



Security Deposit

Each full-time student is billed a \$50 refundable security deposit along with first-term fees. The security deposit will be refunded following the student's graduation or official withdrawal from St. Andrews. Final charges will be deducted from the deposit and the balance will be refunded to the student.

Payment Schedule

Resident Students:	Due Date	Amount
Room reservation deposit (nonrefundable)	May 1	\$ 100.00
Balance of fall/winter fees	July 15	\$5,307.50
Spring term fees	December 15	\$4,342.50
		<hr/> \$9,650.00

Non-resident students:

Fall/winter term fees	July 15	\$3,616.25
Spring term fees	December 15	\$2,958.75
		<hr/> \$6,575.00

Several payment plans are available where students may pay in monthly installments.

Course Load

For purposes of determining costs for tuition and fees, 11-18 credits per term are considered standard course load in the fall and spring terms.

Students who take either a course underload or overload (less than 11 credits or more than 18), will be charged \$207 for each credit over 18 or \$207 for each credit less than 11. Students must have the permission of the associate dean for academic affairs to register for 17 or 18 hours. Students taking more than 18 hours will pay full tuition plus \$207 per credit (1987-88).

Part-Time Students

Part-time students may take the first 24 credits at half tuition (\$103.50 per credit during 1987-88). Part-time students cannot enroll in more than two courses of eight credits total in any single term or in more than four courses or 16 credits per year, and they must be commuters. At the completion of six courses or 24 credits, part-time students will be charged full tuition rates except for students enrolled in the CBM pro-

gram and other students given special exemption by the associate dean for academic affairs. Seniors may not qualify for the reduced tuition rate.

Lab Fees

100 and 200 level courses	\$ 5.00
300 and 400 levels courses	\$10.00

(A student will be charged no more than two lab fees in a given term)

Other Fees

Music fees (cost per fall or spring term)	
One hour of lessons per week	\$200
One half-hour lesson per week	100
Horseback riding (based on number of rides)	
Late registration fee	25
Change of schedule fee	
(for schedule changes after drop-add period)	
Per course added	10
Per course dropped	2
Overload and underload fee	207
(per credit for course loads over 18 credits or under 11 credits)	
Post Office Box fee (per term)	
(required of all students)	2
Graduation fee	
(required of all graduating seniors)	35

These fees are due when they are assessed and are payable at the college business office. Continuous non-payment will result in penalties including withholding of transcripts and preventing registration for classes.

Expenses for Disabled Students

Physically disabled students, their parents and vocational rehabilitation counselors should contact the director of rehabilitation services at St. Andrews to arrange for special services. Added expenses for special services range from \$835 to \$8,350 for the regular academic year, and from \$136 to \$1,360 for the summer session. The specific amounts are based on the services required.

Winter Term Credits

Students are expected to enroll in the winter term and to complete one winter term course for each year in residence. With the permission of the dean of the college or the associate dean for academic affairs, a student may be granted a leave of absence for the winter term. Those students granted a leave of absence will be granted a credit on their spring term charges as follows:

Tuition	10% of the annual tuition charge
Room	No credit on room charges
Board	10% of the annual board charge

Students who withdraw officially from the college or are withdrawn by college action before the beginning of the winter term will receive a refund according to the above schedule. Students who complete the fall term but do not intend to return to St. Andrews for the winter and spring terms will receive the above refund provided they notify the registrar in writing of their intentions before the first day of the winter term.

Students who complete graduation requirements at the end of the fall term will not be charged for winter term tuition, room or board. Part-time students will be charged the regular course rates as stated in the catalog for the winter term.

Each boarding student participating in a St. Andrews winter term catalog course in which the enrolled group will be away from campus for more than three days will automatically receive a credit for the meals missed if notice is given to the business office.

Credit will also be given to each boarding student taking an approved winter term exchange course at another institution or a guided independent study off campus. Prior to the start of winter term, the student must submit to the business office a request showing the approval of a faculty advisor and the registrar to the college business office. All credits will be applied to the student's account in January rather than being refunded prior to the trip. The credit will be calculated at the rate of \$4.42 per day, counting breakfast, lunch and dinner at 1/6, 2/6 and 3/6 of a day, respectively.

There is no tuition credit for students enrolled in St. Andrews courses away from campus.

Refunds for Cancellations

Students who register during the advanced registration period will be considered registered for billing purposes unless a formal cancellation of registration is filed with the registrar. On or after the first day of classes, an enrolled student leaving the college must follow the prescribed procedure for withdrawal from the college. Information related to refunds is given in the *Academic Regulations* section.

Room and Board Policy

St. Andrews automatically classifies each student whose permanent residence is beyond commuting distance from the campus as a resident student unless he or she receives written approval as a non-resident student. Students may apply for non-resident status through the dean of students. When non-resident status is approved after the beginning of a term, charges are prorated according to the time spent in each status.

Financial Aid

St. Andrews' financial assistance program for students includes grants, workshops, scholarships and loans. The primary purpose of the program is to see that no academically qualified student is denied a St. Andrews education for lack of funds.

St. Andrews believes that the primary financial responsibility for a student's education lies with the student and the student's family. Even so, St. Andrews' financial aid program meets the direct demonstrated need of admitted and enrolled students.

Most forms of financial aid at St. Andrews are based on need. Students of exceptional academic ability are eligible for certain scholarships and a few special grants regardless of demonstrated need.

Financial assistance at the college is generally awarded as a combination of grants, workships, loans and/or scholarships in a financial aid package.

Applying for Aid

To be considered for any kind of financial assistance, a student must first be accepted for admission to St. Andrews. Students are encouraged to apply simultaneously for admission and financial aid.

All financial aid applicants must also submit nationally-used standard forms that determine eligibility for state and federal aid. These forms are available from any high school guidance counselor or you may request a copy from the financial aid office at St. Andrews.

St. Andrews prefers: the Financial Aid Form (FAF), which should be mailed to *College Scholarship Service*, Box 2700, Princeton, N.J. 08541; the FFS is also accepted.

There is no deadline for applying for financial assistance at St. Andrews. However, priority will be given to applications received before April 1. The financial aid office will notify each admitted applicant immediately after the determination of the aid package offered by the college.

Grants

College Work-study

Workship is the St. Andrews name for work-study, a part-time campus job with an average work load of 10 hours weekly. A student is paid by check monthly for hours reported worked. If applicable, social security and taxes are withheld from the check. Examples of workships include jobs in the library, in administrative offices and working in the computer center.



Loans

Perkins Loan--(formerly *National Direct Student Loan*)--Repayable loan assistance for students who demonstrate financial need. While the borrower is a student, there is no interest on the principal. Repayment and interest of five percent begins nine months (six months for previous borrowers) after the student graduates, leaves school, or drops below half-time enrollment. The student will be allowed up to ten years to repay the loan at a minimum of \$30 per month.

GSL (Guaranteed Student Loan)--Repayable loan assistance for students who demonstrate financial need. While the borrower is a student, there is no interest on the principal. Repayment and interest of eight percent begins six months after the student graduates, leaves school, or drops below half-time enrollment. The student will be allowed up to ten years to repay the loan at a minimum payment of \$50 per month. An origination fee of five percent is deducted by the lender from each loan payment. An insurance premium of up to three percent may also be deducted from each loan payment.

The Guaranteed Student Loan requires a separate application which may be obtained from a local bank or state agency. Applications are also available from the financial aid office. Completed applications are certified by the financial aid office and mailed to the lender for processing. Checks come directly to the school each term and must be signed by the student before they can be credited to the student's account. You may borrow less than the estimated GSL amount on your award letter, but no more.

Academic Scholarships

Through scholarship awards, St. Andrews seeks to encourage and formally recognize superior academic achievement. Because of the high standards of selectivity set by the awards committee, these prestigious scholarships acknowledge scholarship and leadership and are granted without regard to financial need.

Distinguished Scholarships

Up to ten top freshman applicants are selected as distinguished scholars, each receiving a \$6,000 per year scholarship to St. Andrews.

Entering freshmen who have at least a 3.0 high school grade point average in a college prep curriculum and a minimum combined SAT score of 1000 or an ACT composite of 23 are eligible to apply.

Distinguished scholarships are renewable for each of the years at St. Andrews, provided at least a 3.5 grade point average on a full academic course load is maintained after the end of the first year.

Honors Scholarships

Honors Scholarships ranging from \$1,000 to \$3,500 per year are awarded to students with outstanding academic high school records.

Entering freshmen with at least a 3.0 high school grade point average and a minimum combined SAT score of 1000 or ACT of 23 are eligible to apply.

Honors scholarships are renewable for each of the years at St. Andrews, provided at least a 3.0 grade point average on a full academic course load is maintained after the end of the first year.

Transfer Scholarships

St. Andrews Transfer Scholarships of \$1,000 to \$2,000 per year are awarded to outstanding transfer students and are renewable for on year. Graduates of community and junior colleges with at least a 3.0 college grade point average are eligible to apply.

Outstanding Freshman Awards

Outstanding Freshman Awards of \$500 to \$1,500 per year are awarded to students who have excelled in one or more areas during high school.

Entering freshmen who demonstrate unusual or outstanding leadership or service are eligible to apply.

Outstanding freshman awards are renewable for each of the years the student attends St. Andrews, provided he or she remains in good academic standing.

Creative Arts Scholarships

Creative Arts Scholarships of \$500 to \$1,500 per year will be awarded to students who demonstrate special talents in the arts. Creative arts scholarship applicants will be evaluated on past achievements in the arts, demonstration of creative talent, the recommendation of a teacher or instructor, an on-campus interview and an audition (for music and theatre).

Creative arts scholarships are renewable for each of the years the student attends St. Andrews, provided he or she remains in good academic standing and participates in some way in the arts at St. Andrews.

Partnership-in-Education

St. Andrews provides matching funds up to \$500 when the session of a local congregation contributes \$100 to \$500 toward the education of a student at St. Andrews.

Members of a Presbyterian Church U.S.A. for at least one year are eligible.

Renewal of Aid

Students must reapply for financial assistance each academic year by using the financial aid form of the college scholarship service. Students should request information to reapply for financial assistance before January 1.

A student who is on academic probation for two consecutive fall/spring terms is ineligible for financial assistance.





6 Academic Regulations

Degree Requirements

St. Andrews offers two degrees: bachelor of arts and bachelor of science. Candidates for each degree are required to complete at least 127 credits, including one winter-term course (3 credits) for each year enrolled and two terms of physical education (4 credits), with a grade-point average of 2.0 in all work attempted and in the major field.

Faculty advisors help students plan their courses of study. Students are responsible for seeing that the courses taken meet the requirements for graduation. Special attention should be noted that a total of 48 credits at the 300-400 level is required for graduation. This number (48) includes courses in the student's major area as well as electives, but does not include winter-term

courses other than the one exception which follows. One winter-term internship course completed during a student's junior or senior year may be counted as a 300-400 level course.

Beginning with the 1983-84 academic year, one St. Andrews credit is equivalent to one semester hour. Each course taken at St. Andrews prior to 1982-83 will be counted as 3.5 credits.

Bachelor of Arts

St. Andrews General Education (6 courses) 20 credits
Breadth Courses (5 courses) 15-20 credits
Requirement for a Major (10-15 courses) 36-60 credits
Electives — (24-53 credits)

127 credits*

Majors offered—The bachelor of arts degree is awarded in the following majors: allied health, art, biology, business administration-economics, chemical physics, chemistry, education, English, French, history, literature, mass communications, mathematics, mathematics with an emphasis in computer science, modern language, music, politics, philosophy, physical education, psychology, religion, religion and philosophy and theatre. Thematic and disciplinary contract majors leading to the bachelor of arts degree also may be arranged, in order to allow as much flexibility as possible in each student's course of study. For more information concerning a contract major, see the description under the specific program heading in the curriculum section of the catalog. Additional information may also be obtained by contacting the chairman of a specific major program.

*At least one course must be completed which deals with a "symbols system" other than the English language. Specified courses in foreign languages, computer science, mathematics, music theory and composition, linguistics and other designated courses will meet the "symbols systems" requirement.

Pre-professional programs are available in pre-law, pre-medicine, pre-dentistry, pre-veterinary, pre-paramedical and pre-ministerial areas.

Bachelor of Science

St. Andrews General Education (6 courses) 20 credits
Breadth Courses (5 courses) 15-20 credits
Requirements for a major (14-15 courses**) 48-60 credits
Electives — 15-56 credits

127 credits

Majors offered: biology, chemistry, chemical physics and psychology, medical technology certification and the bachelor of science degree are normally conferred after three years of study at St. Andrews and one year of training at an accredited college of medical technology. A more complete description of this program may be found under *Division of the Mathematical, Natural and Health Sciences*.

*At least one course must be completed which deals with a "symbols system" other than the English language. Specified courses in foreign languages, computer science, mathematics, music theory and composition, linguistics and other designated courses will meet the "symbols systems" requirement.

**This requirement must include eight courses in chemistry and two courses in each of three of the four areas of biology, physics, math and computer science for the chemistry major. For biology majors, eight courses in biology, four courses in chemistry and a total of three courses selected from at least two of the three areas in physics, math and computer science. For chemical-physics majors, six courses in physics, four courses in chemistry, and four courses in mathematics. For psychology majors, eight courses in psychology (including Psy 201 and Psy 202), two courses each in two of the following areas: biology, chemistry, physics and three courses in mathematics and/or computer science.

Requirements for a Major

A student may declare a major or area of emphasis any time after the first term at St. Andrews, but must declare a major before completing the registration process for the junior year. Transfer students accepted with junior or senior status must declare a major upon acceptance as a student at St. Andrews. Declaration of major forms can be secured from the office of the registrar.

An academic major consists of 10-15 courses (36-60 credits). However students may count no more than 56 credits with the same course designation (e.g., English, religion, mathematics, computer science, German, French, business-economics) towards fulfillment of the graduation requirements.

Additional specific information may be obtained by contacting the chairman of a specified major program. Also, see the description under the specific program heading in the curriculum section of this catalog.

Thematic Contract Majors

In addition to the standard disciplinary and interdisciplinary majors listed in this catalog, students have the option of selecting a thematic major. A thematic major is an individualized contract major not specified in the catalog, listing a combination of courses from various major programs which are consistent with the theme of the major and with the student's goals and objectives. Examples of thematic majors include, art history, comparative cultures, children's theatre, women's studies, African studies, southern culture, American studies, horticulture, ecological studies, college administration, legal anthropology, intercultural studies, occupational therapy, Christian education, personnel management and social work. Thematic majors include guided independent studies, winter-term courses and internships and other field experience learning projects.

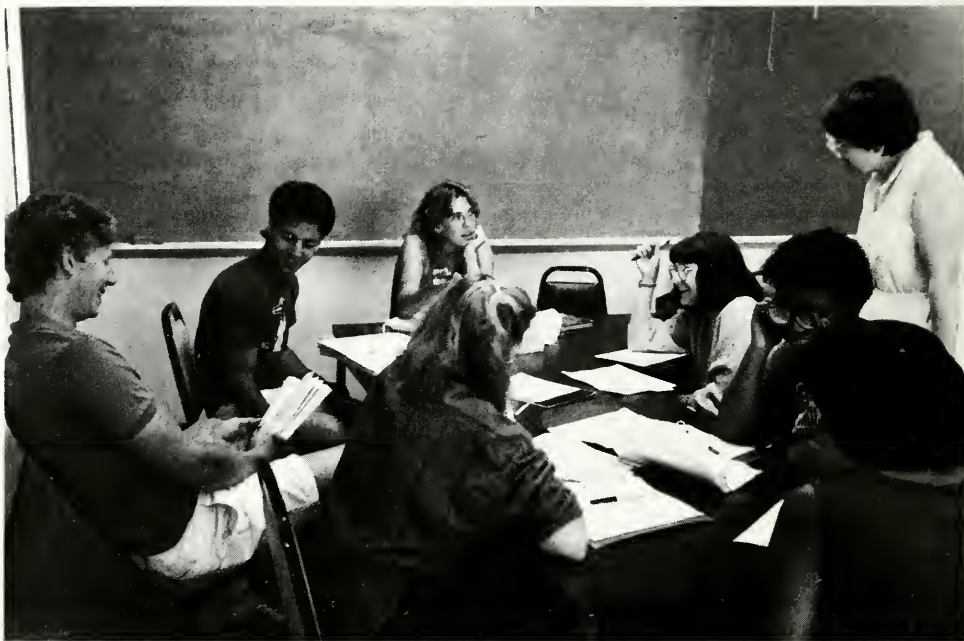
Students interested in thematic majors should confer with the coordinator of thematic majors. In consultation with the coordinator of thematic majors each student who enters a thematic major contract will select at least two faculty advisors, one of whom will be selected as the principal advisor. The advisors must be approved by the coordinator and the faculty advisors will comprise the student's advising team.

Disciplinary Contract Majors

In order to allow as much flexibility as possible in each student's course of study, each of the college major programs offers the option of a disciplinary contract major. For information concerning a contract major, see the description under the specific program heading in the curriculum section of this catalog. Additional information may also be obtained by contacting the chairman of a specified major program.

Academic Minors

St. Andrews offers optional academic minors in selected areas. The academic minor consists of six to eight courses (21-32 credits), half of which must be at the 300-400 level. In addition to the standard disciplinary minors, students may choose to complete a thematic minor consisting of a minimum of eight courses from three or more program areas.



Academic Honors

A variety of opportunities for additional challenge and academic recognition is available for students with unusual promise and outstanding achievements.

1. The General Honors Program

The St. Andrews General Honors Program offers entering students a rigorous and stimulating introduction to academic excellence at the collegiate level and to personal excellence within the global community.

a. Eligibility and Entrance Requirements

The general honors program is open by invitation to students in the top 15 percent of their entering class. To be eligible to participate, a student must give evidence of outstanding academic achievement as well as of commitment to significant service and/or leadership activities in the school, church (or other religious organization), or community. Those seeking an invitation to the general honors program must complete an honors application and essay and participate in an interview session.

b. Curriculum and Activities

The general honors curriculum consists of a four-course sequence of interdisciplinary seminars united around a central theme and core of literary and artistic materials. These courses, team-taught by select faculty members, are to be taken during the student's first two years at St. Andrews. As part of the spring term freshman CORPS (Community Out-Reach/Public Service) seminar, each general honors student will design and carry out a community service project.

During the fall term of the junior year, each general honors student will write a culminating, integrative paper, linking the theme of the four-course sequence to issues raised in the service project and in the chosen academic major field. These papers will be presented to the Honors Student Association, an extracurricular organization of all honors students which provides opportunities for socializing, recreation and educational as well as personal enrichment through sponsored events on and off campus.

c. Certification

Students who complete the four general honors seminars with a grade of B or better, who successfully complete the service project and the integrative paper, and who maintain a cumulative GPA of 3.2 or better on credits attempted will be awarded a general honors certificate. All honors course work and successful completion of the general honors program will be noted on the student's official St. Andrews transcript.

2. Departmental Honors

Independent study opportunities for superior students in disciplinary and thematic majors are provided in many disciplinary and thematic majors.

a. Eligibility and Application

To be eligible for application and continuance in a departmental honors program, a student must achieve and maintain a cumulative grade average on all course work of 3.0 or better and 3.3 or better in major courses, receive recommendation of the faculty in the academic program, and be certified as eligible by the dean of the college.

Applications for departmental honors must be completed and approved by the regular date for advanced registration for the first regular term of the students' senior year.

b. Program Requirements

To graduate with "honors in (the major)," in addition to meeting graduation requirements for the B.A. or B.S. degree, students must (1) successfully complete and earn not less than eight credits and not more than 12 credits of independent study covering work in at least two regular terms with grades of 3.3 or better on each independ-

ent study (designated as 497). (2) present an honors thesis or honors project acceptable to the academic program faculty which offers the major, (3) complete a comprehensive oral examination on the subject matter of the honors thesis or, for students with majors in the fine arts, an appropriate critique of the honors project (performance). An honors examination committee, consisting of at least one faculty member in the academic program, one faculty member outside the academic program and one additional examiner who may be from off-campus, will certify the oral examination, exhibit or performance as worthy of graduation with honors.

The dean of the college will appoint faculty members to the honoring examining committee no later than the beginning of the student's final regular term.

The faculty member supervising the student's independent study will be responsible for reporting grades and certifying successful completion of the departmental honors program. Students who pass the independent studies but are not certified for graduation with honors will receive appropriate course credit and grades for independent study as determined by the supervisor in consultation with the program faculty and examination committee.

3. Commencement Honors*

St. Andrews bestows special recognition upon those students whose academic work has been of superior quality. Effective for graduation in 1988-89 distinctions for graduation honors will be awarded in accord with cumulative grade-point average as listed below:

Summa Cum Laude for students with a cumulative grade average of 3.9 or higher.

Magna Cum Laude for students with a cumulative grade average between 3.75 and 3.89.

Cum Laude for students with a cumulative grade average between 3.5 and 3.74.

To be eligible for distinctions, a student must earn a minimum of 60 credits at St. Andrews. These distinctions will be recorded on diplomas and transcripts.

4. Dean's Honor Roll*

The dean's honor roll recognizes all degree students who have at least a 3.5 grade-point average, at the end of the fall and spring terms. In addition to the grade-point requirement, students must complete at least 11 credits during the term, must not make below a grade of "C" on any course, and must not receive a grade of "I" (incomplete) on any course during the term.

5. Sophomore Honors*

Each spring the college awards sophomore honors to students who have earned a grade-point average of 3.25 or better through the winter term of the sophomore year. Students are ineligible for sophomore honors if they have received a grade of "F" in any college course or are on academic or social probation.

6. St. Andrews Honor Society*

Membership in the honor society is awarded to juniors and seniors enrolled during the spring term who have earned an overall average of 3.5 or better on a minimum of 49 credits at St. Andrews. Students are ineligible for the honor society if they have

received a grade of "F" on any course work at St. Andrews or if they are on academic or social probation. Eligibility for membership will be determined at the end of winter term.

***Grade point averages will be based on all credits attempted.**

Registration

Toward the close of each term, students plan and register for their course programs for the following term in conference with their advisors. New students confer



with their advisors during the orientation period and complete registration on a designated date at the beginning of each term.

Students who register in advanced registration period will be considered registered for billing purposes unless a formal cancellation of registration is filed with the registrar. Cancellations are permitted

through registration day. On or after the first day of classes, an enrolled student leaving the college must follow the prescribed withdrawal procedure.

System of Grading

Each student receives a grade in each course at the close of the term. The grading system is as follows:

Grade	Grade Points*	Interpretation
A	4.0	A grade in the "A" range indicates an excellent performance in which there has been distinguished achievement in all phases of the course.
A-	3.7	
B+	3.3	A grade in the "B" range indicates an above average performance in which there has been distinguished achievement in all phases of the course.
B	3.0	
B-	2.7	
C+	2.3	A grade in the "C" range indicates an average performance in

C	2.0	which a basic understanding of the subject has been
C-	1.7	demonstrated.
D	1.0	A grade of "D" indicates a passing performance in which despite recognizable deficiencies, there is enough merit to warrant a credit.
F	0.0	A grade of "F" indicates failure and will be recorded but will not be counted as a course attempted when computing grade point averages.
W.	0.0	A grade of "W" indicates withdrawal from class and will be recorded but will not be counted as a course attempted when computing grade point averages.
I	0.0	A temporary grade of "T" indicates an incomplete for a course.
P	0.0	A grade of "P" indicates satisfactory performance in a course and will be recorded but will not be counted as a course attempted when computing grade point averages.
NA	0.0	Grade not available at the time grades were compiled.
AU	0.0	Audit

*Grade points are the numerical equivalent of the letter grade. The total number of grade points for a course is obtained by multiplying the numerical equivalent (1.0 to 4.0) by the number of credits assigned to the course. The student's grade point average (GPA) is compiled by dividing the number of grade points earned by the number of credits completed with a grade of "D" or above.

Beginning with the 1987 fall term, a student's grade report will include both the GPA based on all courses attempted and the GPA based on courses passed. The GPA based on courses passed shall continue to be used for the purpose of establishing eligibility for graduation, academic warning and placement on or removal from academic probation. The GPA based on courses attempted shall be used to determine eligibility for sophomore honors, honor society, dean's list and honors designation at graduation.

Grade Appeal Procedure

In the event that a student feels that the grade for a course is not a fair evaluation of the student's effort and performance, the student should make every attempt to resolve the difficulties by discussion with the instructor involved.

If such discussions do not result in a satisfactory solution to the problem, the student should seek the assistance of the appropriate program chairman in resolving the problem.

If this fails, a grade appeal committee will be formed by the program chairman.

This committee will consist of three faculty members; one selected by the instructor involved, another by the student, and the third (who shall be chairman) by agreement of the first two faculty members selected. It is expected that the committee will receive full cooperation from all parties involved. To take effect, the committee's decision must be ratified by the dean of the college.

Any formal grade appeal action involving a committee must be initiated by the student at least two weeks prior to the date for clearing incompletes for the term in which the course was taken. The committee shall reach its decision before the date for clearing incompletes for that term. When special conditions exist, this timetable may be altered by the faculty executive committee.

Pass-Fail Option Grading

Eligible students may exercise the pass-fail option for no more than four courses including winter term and the regular terms.

Students with junior or senior standing may select a total of two elective courses to be graded on a pass-fail basis. Courses in a student's academic major or major program may not be selected for the pass-fail grading option. Students who wish to designate a course to be graded on the pass-fail option must do so in the office of the registrar no earlier than four weeks before the end of classes and no later than two weeks before the end of classes.

Students may enroll in a total of two winter term courses that are offered on a pass-fail option only.

Course Additions, Withdrawals, Incompletes and Failures

Students are permitted to drop or add courses with approval of their faculty advisor for a period of one week following registration day. After this time a grade of "W" is recorded. No student may withdraw from a course after the tenth class day following the day mid-term grades are due in the fall and spring terms without the approval of the faculty executive committee.

Course Audits

Students must have the permission of the associate dean for academic affairs to audit a course. The same registration guidelines and procedures apply to courses to be audited as with any other courses.

Incompletes, Failures and Withdrawals

An incomplete, "I," is given only when circumstances do not justify giving a specific grade. It must be removed within the first four weeks of the term following the one in which the incomplete was received. If not, the incomplete becomes a failure, "F."

A failure, "F," cannot be removed from a student's record. If the course is required for graduation or for a major, it should be repeated the next time it is offered. A course for which credit has been received cannot be repeated without the permission of the dean of the college.

When a student withdraws from a course for any reason before the last day of the drop period with the instructor's and faculty advisor's approval, a grade of "W" will be recorded.

Reports of Grades

Parents as well as students receive academic reports at the end of each term and are also informed of any disciplinary action. Students, however, are expected to inform their parents in such cases and not leave the responsibility entirely up to officials of the college.

Any student who is not a dependent (for federal tax purposes) of parents and does not want copies of grade reports sent to parents should notify the registrar's office. An affidavit certifying that the student is not a dependent of parents may be required.

Classification of Students

A student's classification depends upon the amount of college credit received. Credit for college work is recorded in courses satisfactorily completed. A student is classified as:

- (1) A senior, upon passing 90 credits
- (2) A junior, upon passing 6 credits
- (3) A sophomore, upon passing 28 credits
- (4) A freshman, if the regular admission requirements have been met.
- (5) A special student, if admitted as a non-degree candidate. Regularly matriculated students may not choose this classification to avoid required courses.



Academic Probation

To maintain satisfactory progress toward a degree, a full-time student classified as a freshman, must have a cumulative grade point average of 1.50; if classified as a sophomore, must maintain an average of 1.70; and if classified as a junior or a senior must maintain an average of 1.90. Students must pass at least three courses (9 or more credits) during a regular term to maintain satisfactory progress. Students failing to maintain this progress in grade point average or in courses passed will be suspended, or will be placed on academic probation if allowed to continue. Students not placed on academic probation who fail to maintain a 2.0 grade point average for a regular term or a cumulative 2.0 grade point average will receive an academic warning letter.

A student on academic probation who fails to show marked improvement in academic work during the following term may be asked to withdraw from the college. A

student still on academic probation after two successive regular terms on academic probation is normally ineligible to return. In any case, continuance on this status or dismissal from the college is determined on consultation with the dean of the college and the faculty executive committee.

Eligibility Rule for Extracurricular Activities

All students placed by the faculty executive committee in the category “may not continue without permission of the dean” shall not be eligible to participate in any major extracurricular activity such as collegiate sports, drama productions, offices and standing student government committees or musical organizations. In unusual circumstances where the dean has ascertained that a student’s academic performance would not be adversely affected, the dean may, as part of the conditions of the student’s continued enrollment at the college, allow limited participation in selected extracurricular activities.

A student who is placed on academic probation in two consecutive regular terms and who does not get off academic probation prior to the beginning of the next regular term will be ineligible to participate in any major extracurricular activity. Students placed on academic probation because of lack of satisfactory progress may be removed from probation by the satisfactory completion of a minimum of eight credits during the succeeding summer term at St. Andrews.

Any student convicted of an honor code violation is ineligible to participate in major extracurricular activities for 12 months following the conviction.

Consideration for Readmission

Students who wish to be considered for readmission should contact the associate dean for academic affairs.

Students who have withdrawn voluntarily from the college, while in good academic and social standing, will normally be readmitted to the college upon receipt of request.

However, students who withdraw from the college while their academic or social records are not in good standing, or students who have been suspended from the college for academic or social reasons, must produce evidence of having corrected such deficiencies, or that they now have the capacity of correcting such deficiencies before their request for readmission may be considered.

Course Load

The college recognizes 11-16 credits as a full course load for a student. Students must have the permission of the associate dean for academic affairs to register for less than 11 credits or more than 16 credits. A full course load for the winter term is three credits.

Class Attendance

Regular class attendance is an important student obligation and a student is responsible for all the work, including tests and written work, done in all class meetings.

No right or privilege exists which authorizes a student to be absent from any given number of class meetings.

The instructor in each course will announce and maintain an absence policy in keeping with the nature of the course. Each student should clarify this policy at the beginning of each course.

When absences from class indicate a serious lack of commitment, the associate dean for academic affairs will send an official warning to the student, upon request from the instructor. If attendance does not improve after the warning, the student will be involuntarily withdrawn from the course and will receive the grade of "W" for the course.

Courses normally will have four 55 minute periods available for class meetings, in addition to class meeting times for laboratories if required, each week.

Residence Requirements

A student must complete at least the last 32 credits at St. Andrews in order to obtain a degree from the college.

Withdrawal from the College

Application for complete withdrawal from St. Andrews should be secured by the student from the office of the dean of students. While the several signatures which need to be obtained on the application form may seem laborious to the student wishing to leave the college, they are necessary to assure that the record is cleared before the student leaves.

Students withdrawing during the first week of classes receive no grades.

After the first week of classes, grades of "W" are given under the same procedure used for dropping one course. Students who leave the college without completing the withdrawal procedure will receive failing grades in all courses and will not be entitled to refunds.

Withdrawing students are entitled to refunds, as follows, to be mailed within 30 days of completed withdrawal:

a. Tuition:	Amount of Refund
During first week	75%
During second week	50%
During third week	25%
After third week	none

b. Board refund is allowed regardless of when withdrawal occurs. It is prorated on the basis of the number of meals served through the day withdrawal is completed.

c. No refund is allowed for room charges, regardless as to when withdrawal occurs. The college reserves the right to reassign the room of a student who withdraws or goes on leave during any academic term.

Transfer Credits

Transfer credits from other institutions approved by the appropriate regional accrediting agency will be granted in full provided the courses taken correspond to work offered at St. Andrews. Courses passed with grades of less than "C" are accepted in transfer only if the student's overall record at the previous institution averages "C" or above.

Summer Work at Other Institutions

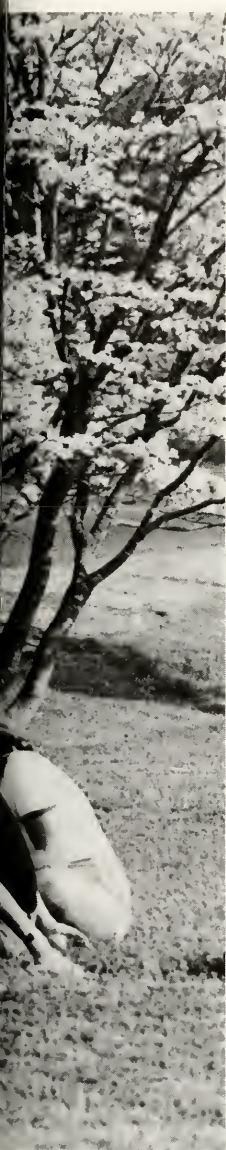
Students desiring to receive credits toward graduation for summer courses at another institution must have the approval of their faculty advisor, the chairman of the division in which the corresponding course is taught, and the registrar. The institution in which work is taken must be fully accredited. Credit will be granted only for courses of the college level which are also allowed toward graduation by the institution conducting the summer school. For credit, the course must be completed at the "C" level, or higher. The student is responsible for requesting the institution to mail an official transcript of summer work to the registrar at St. Andrews as soon as courses are completed.

Correspondence Study

Full-time students may be enrolled in extension courses, correspondence courses and courses for credit from other colleges or universities only if they get approval in advance from the dean of the college. Credit toward the St. Andrews degree will not be allowed, however, unless the grade earned in the course is "C" or better.

Two approved academic courses taken by correspondence may be accepted by St. Andrews toward meeting graduation requirements. Additional academic information may be found in the student handbook, *The Saltire*.





7

Curriculum

The St. Andrews curriculum assumes that education is more than an identifiable body of knowledge and rigid discipline of study. Its core is the general education program, consisting of St. Andrews General Education courses (SAGE) and breadth requirements.

The General Education Program

St. Andrews General Edu- cation (SAGE)

Director: Dick Prust

St. Andrews General Education is a six-course program of studies which moves from skills-oriented courses in the freshman year through courses dealing with the major achievements of world cultures to a senior level course involving decision-making. Each course through

its various sections, offers a variety of options in format, approach or content. These options will generally vary from year to year. Common learning experiences (festivals, concerts, films, lectures, workshops, etc.) in small and large groups complement these courses.

101, 102 Tutorials in Communication

These courses assist students to develop intellectual, imaginative, and social skills. Learning groups of 15-18 students are taught by teams of faculty members and advanced students who also serve as advisers. The fall term tutorial includes orientation to college life and concentrates on informal and formal writing, self-understanding, and the nature of liberal learning. Spring term tutorials emphasize the continuing development of formal writing skills. Tutorials also encourage students to explore academic and career options for the college years and beyond.

221, 222, 321 Christianity and World Cultures

These interdisciplinary team-taught courses provide historical and comparative studies of the major achievements of world cultures. Emphasis is placed on the interaction of religious, artistic, intellectual, political, scientific and social concepts and forces as they are represented in primary documents.

422 Human Choices and Global Issues

This interdisciplinary course provides opportunities for senior students to effect a synthesis of skills, knowledge and values by dealing with major personal and global issues which require ethical decisions informed by humanistic and scientific knowledge.

Breadth Requirements

In order to become acquainted with distinctive methods and areas of content in the several academic approaches to learning, each student is required to complete one course in each of five areas:

1. **The arts** (art, music, theatre, imaginative writing)
2. **The humanities** (English, foreign language, history, literature, philosophy, religion)
3. **The laboratory sciences** (biology, chemistry, physics, psychology)
4. **The social and behavioral sciences** (anthropology, business, economics, history, politics, psychology, sociology)
5. **Physical education** (one course in health and physical fitness, one activity course in life-time sports equaling one course credit)

Each student will complete one course selected from breadth courses or regular courses that deals with symbol systems other than the English language (e.g. computer science, mathematics, logic, foreign languages, music theory)

Programs and Courses

The following pages list the approved course offerings at St. Andrews for the academic year under the three academic divisions of the college. The divisions and programs of study under them are:

Division of the Humanities and the Fine Arts

Art
Mass Communications
English
Foreign Languages
Literature
Music
Philosophy
Religion
Theatre

Division of the Mathematical, Natural and Health Sciences

Biology
Chemistry and Physics
Health, Physical Education and Recreation
Mathematics

Division of the Social and Behavioral Sciences

Anthropology
Business and Economics
Education
History
Politics
Psychology

While every effort is made to schedule a well-balanced list of courses each year, some courses are offered only in alternate years.

In general, courses numbered between 100 and 299 are designed for freshmen and sophomores, and those numbered between 300 and 499 are for juniors and seniors. Odd numbers are used for courses ordinarily offered in the spring term. A year-long course is indicated by joining the course numbers for the two terms with a hyphen, e.g. 101-102. The abbreviation "hpw" following a course title refers to the number of hours per week the course meets.

The requirements for majors are outlined immediately preceeding the list of courses offered in a given program.

Most programs of study listed in this catalog provide for special studies and guided independent study. The college-wide descriptions for each follow and will not be repeated in each program.





Humanities And The Fine Arts

Chairperson: Edna Ann O. Loftus

Departments

Art
English
Foreign Languages
Music
Philosophy
Religion
Theatre

Majors

Art
Communications
English
French
Literature
Modern Languages
Music
Philosophy
Religion
Theatre



Art

Associate Professor Carter (Chairperson), and Associate Professor Woodson

Major in the Visual Arts

The art program offers the art major a balanced program in basic studio courses and art history with more specialized options listed below. For the student interested in art as a vocation, for teaching or for further study in graduate school, the following courses are required:

Studio Art, 122, 145
and two from the following: **123, 207, 211**

Art History: 261, 262
Seminar in Modern

Art: 360

One course in either music or theatre

In accordance with the general college guidelines, the student will work out a contract acceptable to the art faculty. The contract must include at least 12 courses, and four of these courses must be art courses at the 300-400 level.

The non-major is encouraged to take any of the course offerings in art. Students who have an interest in a particular art medium or area of art history not appropriate in a regular course may apply for guided independent study or advanced studies in art. Students with interests related to other fields, such as medical illustration, art restoration, art criticism or museum curatorship may contract for a thematic major.

Minor in the Visual Arts

A minor in art will consist of six courses, three of which will be 300-400 level courses. It is required that **Art 145** and **122** be included in the minor as well as one of the art history courses: **Art 261, 262, 347 or 360.**

Thematic Major in Arts Management

The major in arts management is a thematic major. Each student will work out a contract to meet individual needs, skills and interests. Generally, a student will take a series of business courses, several introductory arts courses and a concentration of courses in one of the arts areas. The following is an example of a thematic major in arts management. Individual contracts may differ slightly.

B/E 209: Accounting

B/E 312: Principles of Marketing

B/E 325: Principles of Management

B/E 333: Advertising

CS 100: Intro. to Computer Systems

Thea 103: Public Speaking

Eng 333: Journalism

B/E/FA 490: Arts Management Seminar

B/E/FA 495: Internship in field of concentration

Two survey courses in arts areas other than that of concentration.

At least five courses in one of the arts areas (student's field of concentration).

Courses in Art

Selected studio art courses carry a lab fee of \$25.00

111 Introduction to the Visual Arts

3 credits

A foundation course designed to develop the student's ability to respond to visual images created by humans. It is intended to enable the student to recognize and describe his or her own physical, emotional and intellectual responses to visual works of art. The course is to be differentiated from an art history survey course in that the content of the course will not be presented historically. Emphasis is on the observer's awareness of the formal and sensuous aspects of the arts as well as the imaginative content that can be transmitted in this "language." Lecture discussion, slide presentations. Offered fall term. Open to freshmen and non-majors.

122 Drawing I

3 credits

An introduction to fundamental drawing problems, stressing line, marks and space using a variety of media. Required for majors.

123 Sculpture I

3 credits

A course to develop, through studio problems, an awareness of the expressive potential of three-dimensional form. Basic modeling and casting techniques.

145 Design Basics

3 credits

An introduction to the fundamental elements and principles of design (line, color, texture, value, unity, balance, rhythm, etc.) as these are related to drawing, painting and the graphic arts, as well as other design fields. A flexible and combined lecture and studio format introduces the student to general design concepts through specific problems and projects. With basic drawing, this course serves as a foundation for further and more advanced work in the visual arts and is required of majors. Open to freshmen and non-majors.

207 Printmaking I

3 credits

An introduction to traditional techniques of relief, intaglio and screen process printing. Prerequisite: **Art 122** or permission of instructor.

211 Painting I

3 credits

An introduction to the fundamental techniques and materials of traditional oil painting: supports and grounds, pigments, underpainting, glazing, stippling, scumbling and alla prima processes. Prerequisite: **Art 122** and/or **Art 145** or permission of instructor.

213 Aesthetics

3 credits

See **Philosophy 213**.

222 Drawing II

3 credits

A continuation and expansion of **Art 122** with additional emphasis on compositional problems. Prerequisite: **122**

223 Sculpture II

3 credits

Further exploration of three-dimensionality using a variety of materials and techniques. Modeling, assemblage, carving. Prerequisite: **123**. Six studio hours. (Subsequent and more advanced work in sculpture is available in **Art 380, 480**.)

261 Art History Survey I

3 credits

A study of the sociological, technical and aesthetic implications of the visual arts produced in their changing historical context from prehistory through the late Gothic periods.

262 Art History II

3 credits

A study of the sociological, technical and aesthetic implications of the visual arts produced in their changing historical context from the early Renaissance to Impressionism.

271 Computer Graphics

3 credits

An introduction to the important contemporary electronic medium of computer graphics. Two state-of-the-art Artronics studio computers are used with additional hardware and software packages suited to producing visual imagery for both fine and commercial art purposes. A rudimentary introduction to animation is included. Some previous computer exposure is helpful, though no programming is involved. (More advanced work is available in **Art 380, 480**). Prerequisites: **Art 145** or permission of instructor.

307 Printmaking II

4 credits

Traditional and contemporary processes of relief, intaglio, screen and mixed media printing in both black and white and color. Prerequisite: **Art 211** or permission (subsequent and more advanced work in painting is available in **Art 380, 480**)

321 Art in Elementary School

4 credits

A study of the art produced during the successive developmental stages of childhood and early adolescence as a revelation of the total child. An examination of the play impulse as the basis of the creative process, and its relevance and importance for elementary education. A survey of the materials and methods best suited to the expressive needs of the stages of childhood. Readings, lectures, film and studio sessions are combined with actual projects conducted in local elementary school classrooms.

347 Comparative Art Forms: East and West

4 credits

A comparative study of two ways of knowing as they are revealed through the visual languages of cultures in the East and West. Images of nature, images of God and images of humanity, as well as basic architectural forms of the different cultures are studied as reflections of profoundly different Oriental and Western realities.

360 Seminar in Modern Art

4 credits

An investigation of the art of the twentieth century. The study of art criticism and aesthetics will be integral to the chronological analysis of art created during this period. Prerequisite: Either **111, 261 or 262**.

380, 480 Advanced Studies in Art

This course will be a coordinated seminar of independent projects dealing with advanced problems in various media. Specific objectives and responsibilities will be student formulated at the beginning of the course and pursued within the framework of the elected medium. Prerequisites: both levels of the medium chosen plus instructor's approval.

Sections: A. Drawing
 B. Printmaking
 C. Painting
 D. Sculpture
 E. Art History
 F. Computer Graphics

422 Figure Drawing

4 credits

A study of the human figure from a live model.

190, 290, 390, 490 Special Studies in Art

195, 295, 395, 495 Internship

199, 299, 399, 499 Guided Independent Study in Art

The following arts courses satisfy breadth courses in the arts:

Art 111

145

261

262

347

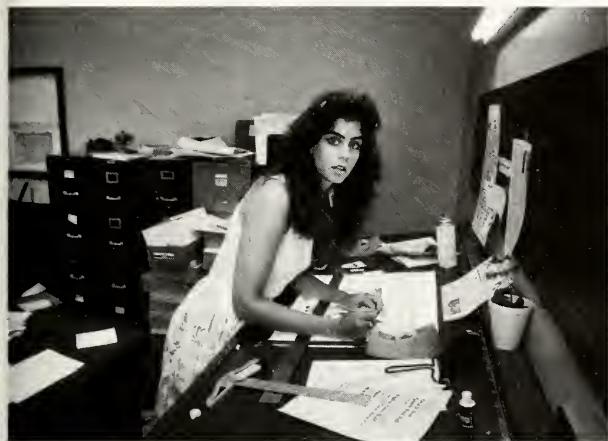
360

Mass Communications

The faculty members are taken from various programs within the college.

The mass communications major is an interdisciplinary program designed to promote a more sophisticated and critical response to the mass media among the general student population, while also preparing qualified students for challenging career opportunities in a variety of fields in mass communications.

Recognizing both the common denominator elements in the study of mass communications and the narrower areas of specialization, there is a core curriculum for all majors and three tracks or areas of concentration. The program will function as a contract major, subject to the same rules that govern all other contract majors.



A. The Core Curriculum:

A strong foundation in mass communications requires a broad understanding of the nature and significance of the mass media, as well as a refinement of the student's basic communications skills—writing and public speaking. It is also desirable for mass communications students to acquire some broad ethical perspectives on the mass communications industry and

to gain some practical experience in one or more mass communications fields.

All communications majors are expected to complete the following courses:

Communications 130, 131 Introduction to Mass Communications

3 credits each

An introduction to contemporary theories and methods of mass communication. The course will examine the nature of the print and broadcast media and their impact on society. Special attention will be given to the evolution of the mass media and to such issues as freedom of the press, censorship and government regulations, mass media marketing and advertising, and careers in mass communications.

Public Speaking: Thea 103

Business Ethics: Phil 231

Journalism: Eng 333

Internships in Communications: Comm. 195, 295, 395, 495 (at least two)

B. The Three Concentration Areas

All majors are expected to concentrate in one of the following tracks:

1. Media Marketing and Management:

This concentration area is designed to give the student a broad background suitable for a managerial role in the communications field, whether in business, industry or government. This track is particularly appropriate for those interested in pursuing advertising, public relations or internal business communications.

Suggested Course List

Macroeconomics (B/E 232)
Principles of Marketing (B/E 312)
Business Law (B/E 315)
Principles of Management (B/E 325)
Advertising (B/E 333)
Marketing Management (B/E 446)
Statistics (Math 205)
Social Psychology (Psy 220)
Organizational Behavior (Psy 235)
Public Administration (Poli 301)
Arts Management (Art 390)
Advanced Journalism

2. Print and Broadcast Journalism

This concentration area is designed to give students the background and skills needed for a wide range of communications careers, including newspapers, television and radio. It is essential that the communications major with a print and broadcast emphasis be trained in writing well for the media. Students should also have an understanding of a variety of technical issues associated with mass media production. No less important is a general background in the legal and political context of the mass media.

Suggested Course List

Imaginative Writing (Eng 215)
Writing Fiction (Eng 414)
Advanced Journalism
News Editing and Layout
Stagecraft or Scene Design (Thea 205/Thea 305)
Oral Interpretation (Thea 390)

Introduction to Perception (Psy 220)
Photography (Art 290)
American Government (Poli 201)
Contemporary Political Issues (Poli 276)

3. Visual Media:

A communications major with this emphasis finds its basis and origin in the traditional language of the fine arts. Modern uses of the visual image include the fields of art and theatre as well as commercial applications such as television production and computer graphics. Graduates may be seeking careers in such areas or in related fields such as business, education or those sciences that rely on communications through visual imagery.

Suggested Course List

Drawing I (Art 122)
Design Basics (Art 145)
Printmaking I (Art 207)
Photography (Art 290)
Commercial Art (Art 390)
Computer Graphics I & II
Introduction to Perception (Psy 211)
Aesthetics (Phil 213)
News Editing and Layout
Scene Design (Thea 305)
Lighting (Thea 306)
History of the Motion Picture (Thea 307)

English

Distinguished Professors C. Bennett and White; Professor Bayes (Chairperson), Associate Professor E.A. Loftus

Major in English

The English major provides a concentration in humane learning as an end in itself. It also prepares students for entry into graduate studies in English or for admission to professional studies in law, social services and theology. When the necessary sciences are also studied it prepares students for admission to schools of medicine and dentistry. Governmental and business agencies desire English majors for executive training. With selection of prescribed courses, an English major leads to teacher certification.

Courses of study within the English major are designed to meet the needs of the individual student. English majors will contract with the English faculty the courses to be taken in their degree program. Students will be invited to contract English majors of the following kinds, or to propose alternatives that more adequately meet their needs: the major in English



and American literature (primarily for persons anticipating graduate study in literature); English for the public schools; English with an emphasis in journalism and other media; English with an emphasis in imaginative writing; English for careers in the church; English for pre-law; English for business careers; English for civil service careers.

Contracts will be developed that are mutually agreeable to the English faculty and the student and that include serious studies in English while drawing upon other resources of the college that point toward particular vocations.

No fewer than ten courses must be stipulated in the contract. At least three courses must be lower division offerings in **English: 208, 209, 210, 211, 212, 215, 252**. At least four English courses at the 300-400 level must be taken.

Minor in English

There are two types of minors in English, a minor with a literature emphasis and a minor with a writing emphasis.

For the literature minor, six courses are required, half at the lower level and half at the upper level. Only one writing course (e.g. journalism) may be counted in the six courses for this minor.

For the writing minor, a minimum of six courses are required, including: **English 215, 333, 301**, two courses in creative writing at the 300 or 400 level and one or more of the following: **English 209, 210, 211, 252**.

Honors in English

A major may receive "honors in English" upon meeting the following criteria:

- achieving a cumulative grade average of 3.0 or better in all courses and a 3.3 or better in courses in English

- completing **English 491** (competency honors) and **English 497** (academic honors) with members of the English program with grades of 3.3 or better in **English 497**; completing and successfully defending a thesis or project in a comprehensive oral examination before an examining committee composed of at least one member of the English program, one St. Andrews faculty member outside the program and one additional outside examiner.

Courses in English

208 The Bible as Literature

3 credits

A study of the Bible as literary expression with attention to its many art forms and its continuing influence on the life and thought of artists and writers in the modern world.

209 Survey of the Literature of the United States (See Literature 209)

210 Classics of the Western Literary Tradition (See Literature 210)

211 Masterpieces of English Literature (See Literature 212)

212 Literature of the Non-Western World (See Literature 212)

215 Imaginative Writing

3 credits

Training and practice in the writing of verse, prose, fiction and drama.

251 Black American Literature

3 credits

The mind and spirit of the American Negro as expressed in literary art. Works by 20th century black Americans such as W.E.B. DuBois, James Weldon Johnson, Claude McKay, Jean Toomer, Langston Hughes, Richard Wright, Ralph Ellison, James Baldwin, Melvin B. Tolson, Gwendolyn Brooks, LeRoi Jones and Don L. Lee. (Also offered as **Literature 251**).

252 Modern British and American Poetry

3 credits

Readings from a wide selection of modern British and American poets. Special attention will be given to Gerard Manley Hopkins, William Butler Yeats, Robert Frost, Ezra Pound and William Carlos Williams.

301 Shakespeare

4 credits

A study of the major histories, comedies and tragedies of Shakespeare against the background of the English Renaissance. Particular emphasis will be placed on the variety of critical approaches possible in a study of Shakespeare. Prerequisite: junior standing or consent of the instructor.

302 Chaucer

4 credits

A detailed examination of *The Canterbury Tales* in the context of medieval aesthetics and literary forms. Recording will be used to introduce the student to the sounds and structure of Chaucer's language. Prerequisite: junior standing or consent of the instructor.

303 Aspects of the English Language

4 credits

An introduction to the nature of language, with emphasis on contemporary approaches to the structure of the English language. Prerequisite: junior standing or consent of the instructor.

308 Victorian Literature

4 credits

A study of the major poets and essayists of Victorian England. Prerequisite: junior standing or consent of the instructor.

309 Modern Novel

4 credits

A study of representative novels of the 20th century. Analysis of novels by Lagerkvist, Gide, Mauriac, Camus, Bernanos, Silone, Paton, Unamuno and Greene. Prerequisite: junior standing or consent of the instructor (also offered as **Literature 309**).

311 The American Renaissance

4 credits

A study of the literature of the American Renaissance with particular emphasis on Emerson, Thoreau, Whitman, Hawthorne, Melville and Mark Twain. Prerequisite: junior standing or the consent of the instructor.

312 Dramatic Literature (See Theatre 312)

313 The Art of Teaching English

4 credits

A study of the art and methodology of teaching English language and literature. Not offered for credit toward the English major. This course is restricted to English education majors and is taught in conjunction with the student teaching internship.

314 Elizabethan Literature

4 credits

An examination of major poets and dramatists of the English Renaissance excluding Shakespeare. The course will focus on Spenser, Donne, and the Jacobean dramatists. Prerequisites: junior standing or consent of the instructor.

315 American Fiction of the 20th Century

4 credits

A study of representative American fiction of the 20th century. Analysis of novels by such writers as Norris, Dreiser, Lewis, Hemingway, Faulkner, Dos Passos, Steinbeck, Wright, Warren, Bellow, Malamud and Oates. Prerequisite: junior standing or consent of the instructor.

316 The English Novel

4 credits

Representative works of the principal novelists in the English tradition. Analysis of novels by such writers as Fielding, Austen, Dickens, Hardy, Conrad, Woolf, Joyce and Greene. Prerequisite: junior standing or consent of the instructor.

317 Literature of the Romantic Period

4 credits

A study of the chief poets and critics of English Romanticism. Prerequisite: junior standing or consent of the instructor.

319 Literature for Children and Youth (See Education 319)

320 Playwriting (See Theatre 320)

333 Journalism

4 credits

A practical and theoretical study in editing newspapers and magazines, including examination of problems in editing for radio and television. Prerequisite: typing ability and consent of the instructor. Seniors will have preference.

353 Modern Japanese Fiction (in English translation)

4 credits

Considerations of contemporary Japanese cultural, social and aesthetic values seen through the novel and short story. Kawabata, Mishima, Tanizaki, Oe, and Dazai will be among those studied, as will such American authorities as Hearn, Benedict, Richie and Keene. (Also offered as **Literature 353**).

401 Milton

4 credits

Intensive reading of Milton's poetry with major emphasis on *Paradise Lost* and *Samson Agonistes*. Collateral readings from the prose. Prerequisite: junior standing or consent of the instructor.

413 The Writing of Verse

4 credits

Advanced study and practice in the composition of poetry. The course will include attention to traditional and contemporary poetry writing and publishing, as well as modern literary criticism and manuscript marketing. Prerequisites: **English 215** and **English 252** or consent of instructor.

414 Writing Fiction

4 credits

Students will write short stories. The instructor will discuss the writing with individuals and groups. Writing problems and related student needs will direct the teaching. Good short stories will be read as examples to discuss and examine. Prerequisites: **English 215** or consent of instructor.

491 Competency Honors

4 credits

Open by invitation of the English faculty only. Exceptional work done by the student, working independently under faculty supervision, in acquiring skill in using methodologies basic to literary research, addressing a specific topic, author or genre.

497 Academic Honors

4 credits

Open by invitation of the English faculty only. Exceptional work done by the student, working independently under faculty supervision, in traditional, comprehensive, systematic research over an extended period of time resulting in a senior thesis or project of high merit.

190, 290, 390, 490 Special Studies in English

195, 299, 399, 499 Guided Independent Study in English

The following courses are not taught on campus but are overseas offerings only:

371 The Pound Era

4 credits

A study of Ezra Pound and his 20th century contemporaries in literature including such writers as T.S. Eliot, e.e. cummings, William Carlos Williams, Basil Bunting, H.D. and Marianne Moore. **Offered overseas only.**

372 Myth and Agro-Archaeology

4 credits

An academic and field study of mythology and agriculture as the roots of culture, government and the fine arts. **Offered overseas only.**

All English literature courses satisfy the humanities breadth requirements.

English 215, 413, 414 all satisfy arts breadth requirements.

Literature

The faculty members are from the English and Foreign Language Programs.

Major in Literature

The literature major consists of two of the following literature courses: **210, 211, 212, French, German or Spanish 203, 204, 301** and eight literature courses in English, French, German or Spanish, or foreign literature in translation, at least seven of which must be at the 300-400 level. If appropriate, a course in literature in translation will carry the corresponding number of the foreign language course. It is assumed that a literature major will be interested in exploring a wide range of these literatures.

Contract Majors in Literature

Literature also offers three contract-major options:

1. Preparation for comparative literature
2. Imaginative writing and translation
3. Literature with a linguistics/language concentration

General requirements for the contract-major options:

1. Courses in at least three different national literatures
2. **Literature 210: Classics of the Western Literary Tradition**
3. **English 301: Shakespeare**
4. Two terms of a foreign language

Specific requirements and recommendations for the contract-major option:

1. Preparation for comparative literature:
 - a. **English 302: Chaucer** (strongly recommended)
 - b. A second foreign language (strongly recommended)
2. Imaginative writing and translation:
 - a. **English 215: Imaginative Writing** (required)
 - b. Similar courses (e.g., playwriting) are strongly recommended.
3. Literature with a linguistics/language concentration:
 - a. **English 303: Aspects of the English Language** (required)
 - b. **Language 251: Introduction to the Study of Language** (required)



- c. **Philosophy 210: Introduction to Logic** (required)
- d. **Mathematics 110: The Language and Logic of Mathematics**

Courses in Literature

208 The Bible as Literature

3 credits

(See **English 208**)

209 Survey of the Literature of the United States

3 credits

An overview of American literature from Colonial times through the present. (Also offered as **English 209**).

210 Classics of the Western Literary Tradition

3 credits

Studies in the major formative classics of the West. Emphasis will be on the continuing significance of these texts for understanding the human condition. (Also offered as **English 210**.)

211 Masterpieces of English Literature

3 credits

A survey of major works of English literature. Readings will generally be drawn from Beowulf, Chaucer, Spenser, Milton, Donne, Dryden, Pope, Johnson, Wordsworth, Shelley, Keats and Browning. Special attention will be given to the themes of perennial interest such as love and death, man and woman, freedom and servitude. (Also offered as **English 211**.)

212 Literature of the Non-Western World

3 credits

Readings in selections of non-Western literature. Special attention will be given to these texts as indexes of culture, as clues to human values and thought patterns, and as commentaries on cultural assumptions. (Also offered as **English 212**.)

251 Black American Literature

3 credits (See **English 251**)

307 A History of the Motion Picture

4 credits (See **Theatre 307**)

309 Modern Novel

4 credits (See **English 309**)

353 Modern Japanese Fiction (in English translation)

4 credits (See English 353)

Any literature course will satisfy the humanities breadth requirements.

Foreign Languages

Professor Neylans; Associate Professors Geffert (chairperson), W. Loftus; Assistant Professor Randle Frink

Any student planning a career with international interests (businesss, politics, etc.) or work in large metropolitan areas may wish to consider a series of foreign language courses to provide another marketable skill. The following group is highly recommended:

*203, 204	F.L. I, II
301	F.L. III
322	Adv. Comp. & Conv.
331	Culture & Civilization

* Prior language study may allow a student to omit **F.L. 203, 204** and begin with the **301** course.

Contract Majors in Modern Languages

Contract majors involving various combinations of modern foreign languages or combinations of modern foreign languages with various fields of study which a student wishes to relate to foreign languages (e.g., history, politics, the sciences,



theatre, business, religion, etc.) are available. The program faculty and the student will work out a contract, in accordance with the general college guidelines, which is acceptable to the language faculty and to the student.

The general requirements are that the contract include at least 12 courses:

- a) a minimum of six 300-400 level foreign language courses
- b) at least one course in linguistics
- c) a minimum of five other courses, at least one of which must be on the 300-400 level.

Major in French

The French major consists of eight French courses above the 200 level usually including **301, 322 or 331, 341, 342** and at least three other French courses on the 300-400 level; a course in linguistics; and at least two courses in a second foreign language. With proper courses in education this program will provide for teacher certification.

Minor in Foreign Language

A minor in a single foreign language will consist of six courses in the language and would normally include **203-204**, and four 300-400 level courses. It is recommended that **322** and/or **331** be included in the minor. Students who begin their study at **301** or beyond will normally take additional courses at the 300-400 level. In some cases, depending on specific needs, students who do not need to take **203-204** in their first language may be allowed to take the first-year level in a second language as part of their minor, in which case the minor will be called foreign languages instead of French, German or Spanish.

Courses in Chinese

The courses offered in Chinese may be taken in part at St. Andrews, but it is anticipated that students participating in the China semester will take 12 hrs. in Chinese while in Beijing.

All students will be given a placement test upon arrival in Beijing. Based upon previous language study and test scores, the student will be placed in a class of appropriate level and intensity.

Chinese 101, 102 Elementary Chinese

4 credits each

This level of Chinese deals with grammar, oral language, the pinyin style of Chinese romanization and Mandarin phonetics. Writing and reading are taught as a tool of Chinese grammar. Students are expected to have an active knowledge of 600 characters and a passive knowledge of 800 at the conclusion of the course and to be able to write short essays in Chinese.

Chinese 201, 201 Intermediate Chinese

4 credits each

At this level, emphasis is placed upon consolidating the student's knowledge of grammar, sentence patterns and vocabulary. Chinese will be the primary mode of instruction through simplified characters. A major goal is to advance the student's Chinese from textbook Chinese to more practical daily language.

Chinese 301, 302 Advanced Intermediate Chinese

4 credits each

Conducted primarily in Chinese, this level is designed to enable the student to make the final transition from textbook Chinese to reading, writing and speaking Chinese through readings in contemporary literature and current newspapers. Students will discuss (in Chinese) their readings and do some expository writing. Students will be exposed to simplified and complex characters.

Chinese 401, 402 Advanced Chinese

4 credits each

This level is designed to strengthen the student's knowledge of Chinese culture,

current events and contemporary society through Chinese source material. Students enrolling in this level are expected to be relatively fluent in Chinese as well as to have some general knowledge of Chinese history and culture.

Courses in French

203, 204 French Language I, II

3 credits each

Communicating in French on a practical level. The grammar will be presented by means of comparisons and contrasts with the English language. This course assumes active participation by the student both in and out of class.

301 French Language III

4 credits

Assumes a basic ability to use French. This course is individualized as much as possible to allow each student to acquire the particular vocabulary and skills necessary to his or her discipline or career objectives. Prerequisites: **French 204** or advanced placement.

322 Advanced Composition and Conversation

4 credits

Designed for students who have acquired a working knowledge of the language, this course offers practice in advanced composition and conversation. Prerequisites: **French 301** or permission of the French faculty.

331 French Culture and Civilization

4 credits

An introduction to French history, art and literature from the Middle Ages to the present, with emphasis on contemporary French and its influence in North America, Africa and Asia. Prerequisites: **French 301** or permission of the French faculty.

341 French Literature: Middle Ages to the 17th Century

4 credits

An introduction to French literature from the Middle Ages to the 17th century, presenting the major authors, schools, themes and techniques. Wide reading, oral and written reports. Prerequisites: **French 301** or permission of the French faculty.

342 French Literature: 18th Century to the Present

4 credits

An introduction to French literature from the 18th century to the present, emphasizing the major authors, schools, themes and techniques. Wide reading, oral and written reports. Prerequisites: **French 301** or permission of the French faculty.

421 Advanced French Literature

4 credits

Presupposing a broad general knowledge of the evolution of French literature from the Middle Ages to the present, this course considers particular authors, groups, themes or genres having a significant impact on French literature. The content of this course will vary on a rotating basis over a three-year period. Prerequisites: **French 341, 342** or permission of the French faculty.

190, 290, 390, 490 Special Studies in French

199, 299, 399, 499 Guided Independent Study in French

Courses in German

203, 204 German Language I, II

3 credits each

Communicating in German on a practical level. The grammar is presented by means of comparisons and contrasts with the English language. This course assumes active participation by the student, both in and out of class.

301 German Language III

4 credits

Assumes a basic ability to use German. This course is individualized as much as possible to allow each student to acquire the particular vocabulary and skills necessary to his or her discipline or career objectives. Prerequisites **German 204** or permission of the German faculty.

322 Advanced Composition and Conversation

4 credits

Designed for students who have acquired a working knowledge of the language, this course offers practice in advanced composition and conversation. Prerequisites: **German 301** or permission of the German faculty.

331 German Culture and Civilization

4 credits

An introduction to German history, art and literature from the Middle Ages to the present with emphasis on North America. Prerequisites: **German 301** or permission of the German faculty.

190, 290, 390, 490 Special Studies in German

199, 299, 399, 499 Guided Independent Study in German

Courses in Greek

Greek 101 Elementary Greek

3 credits

Introduction to grammar and vocabulary of New Testament Greek. Translation of simple sentences.

Greek 102 Elementary Greek

3 credits

Prerequisite: **Greek 101**. Continuation of grammar and vocabulary of New Testament Greek. Translation of new sentences.

Greek 201 Intermediate Greek

3 credits

Prerequisites: **Greek 101 and 102**. Continuation of grammar and vocabulary of New Testament Greek. Beginning translation of New Testament texts.

Greek 202 Intermediate Greek

3 credits

Prerequisites **Greek 101, 102 and 201**. Continuation of grammar and vocabulary of New Testament Greek. Intermediate level. Translation and exegesis of New Testament texts.

Courses in Spanish

203, 204 Spanish Language I, II

3 credits each

Communicating in Spanish on a practical level. The grammar is presented by means of comparisons and contrasts with the English language. This course assumes active participation by the student, both in and out of class.

301 Spanish Language III

4 credits

Assumes a basic ability to use Spanish. This course is individualized as much as possible to allow each student to acquire the particular vocabulary and skills necessary to his or her discipline or career objectives. Prerequisites: **Spanish 204** or advanced placement.

322 Advanced Composition and Conversation

4 credits

Designed for students who have acquired a working knowledge of the language, this course offers practice in advanced composition and conversation. Prerequisite: **Spanish 301** or permission of the Spanish faculty.

331 Spanish Culture and Civilization

4 credits

An introduction to Spanish history, art and literature from the Middle Ages to the present, with emphasis on contemporary Spanish, and its influence in North and South America. Prerequisite: **Spanish 301** or permission of the Spanish faculty.

190, 290, 390, 490 Special Studies in Spanish

199, 299, 399, 499 Guided Independent Study in Spanish

Course in Language

Language 251

251 Introduction to Linguistics

3 credits

Introduction to an understanding of language structures. Phonetics, phonemics, and morphology, English system and grammatical systems, including transformational grammar will be considered. The course will include a module encompassing the teaching of reading.

All courses listed under *Foreign Language* will satisfy the humanities breadth requirements.

Additionally, these courses satisfy the symbols requirements:

Chinese 101, 102

French 203, 204, 301, 322

German 203, 204, 301, 322

Greek 101, 102

Spanish 203, 204, 301, 322

Language 251

Music

Associate Professor R. Engelson, Assistant Professors Maisonpierre (chairperson), Moss.

Major in Music

The music major is designed to offer a bachelor of arts degree in music performance. The music major must include no fewer than 10 courses, of which at least six must be at the 300-400 level. The following courses are required: **MUS 210, 211, 310, 311, 307, 308 and 404**. It is also recommended that majors take at least three of the following: **MUS 236, 237, 335, 336, America's Music** (special studies) and **Internships in Music**. Music majors are required to participate in applied lessons and ensembles every term.



Contract Major

The contract major offers flexibility to students who wish to pursue combined areas of interest, such as music/theatre, music/business, music/religion, etc. Contracts are individually developed by each student in consultation with his or her advisor and are subject to program approval. Required courses for all contracts are the same as those listed above, with the exception of **MUS 404**. Lessons and ensemble participation are also required.

Minor in Music

Students wishing to minor in music must take a minimum of six courses, at least three of which must be at the 300-400 level. Required courses are **MUS 210, 211, 307 and 308**. In addition, students minoring in music are required to participate in music lessons and ensembles for at least two years.

Courses in Music

141 Introduction to Music

3 credits

A course designed to serve students as an introduction to the wide-ranging field of music. It will incorporate elements of beginning music theory, music appreciation and other musical elements. Meant for those students who need to start from "the beginning"—names of notes, familiarity with instruments, brief survey of musical styles. Could serve as a prelude course to **Music Theory I**.

210 Music Theory I

3 credits

The first course in a comprehensive four-term sequence in music theory that deals with studies of harmonic structures, voice leading techniques, counterpoint and formal structures, and how they integrate into music history. Emphasis in **Theory I** is on ear training; melodic, harmonic and rhythmic dictation; and sight singing.

211 Music Theory II

3 credits

Continuation of **Music Theory I**. Study of voice-leading and harmonic analysis. Prerequisite: **MUS 210** or permission of the instructor.

236 History of Jazz

3 credits

This course will trace the development of jazz from its inception to the present day. Dixieland, swing, bop, cool and various avant-garde styles will be examined as well as the contribution of African, European, Latin and Oriental musics to the formation of jazz. Much emphasis will be placed on the development of aural skills, particularly the ability to distinguish various jazz styles.

237 Introduction to Ethnic Music

3 credits

This course will serve as an introduction to the field of ethnomusicology, its methodology and purposes. Students will study the basic theoretical and stylistic features

of Oriental, African, Latin and South American, Islamic, Indian and Native American music. Emphasis will also be given to American folk music that exists only in an oral tradition. Field work is a possibility.

251 Music Appreciation

3 credits

A listening course, designed for the non-major, to develop perceptions in listening to music for enjoyment. In addition to learning about the basic elements of music and the instruments of the orchestra, this class will study the artistic characteristics of each musical era and look at representative musical styles and composers of those eras.

253 Voice Class

3 credits

A course designed to help students develop healthier use of the voice for both song and speech. Topics will include breathing technique, tone production, vocal resonance, diction and basic musicianship. Professor and student will select appropriate song literature of varying styles. No previous training required.

307 Music History I

4 credits

A historical/analytical study of characteristic styles of Western music through the middle of the 18th century, with emphasis on Classical and Romantic forms and composers of the Renaissance and Baroque periods.

308 Music History II

4 credits

A historical/analytical study of the characteristics and styles of Western music through 20th century trends, with emphasis on Classical and Romantic forms and composers.

310 Music Theory III

4 credits

Study of advanced harmony and introduction to counterpoint. Prerequisite: MUS 211.

311 Music Theory IV

4 credits

Continuation of advanced harmony and counterpoint; introduction to formal analysis. Prerequisite: MUS 310.

335 Music of the Western Church

4 credits

This course will introduce students to music of our Western church traditions, from Biblical roots to the present day. Areas of concentration will be the historical role

of music in worship, a survey of the musical styles of various denominations (Roman Catholic, Lutheran, Presbyterian, Anglican, etc.) and the recent trends in modern-day religious music.

336 History of Opera

4 credits

This course will trace the development of opera from its roots in the Florentine Camerata to the present. Attention will also be given to pre-operatic forms such as the madrigal-comedy. Areas of emphasis will include theoretical discussions of opera, the musical forms employed in opera and the role of the orchestra in what is essentially a vocal/dramatic genre. An overview of the historical development of the opera libretto will also be given from its inception of a revival of Greek tragedy to the existentialist works of the 20th century.

353 Music in the Elementary Schools

4 credits

A study of the fundamentals of music and the methods and materials for teaching music in elementary school. This course is designed for education majors in accordance with the requirements of the state of North Carolina. This class will organize into sections according to musical development, working together at least one meeting per week in examination of current classroom materials. Prerequisite: Junior standing or permission of instructor.

404 Practicum in Conducting

4 credits

Conducting techniques, history of conducting and the study of representative literature, with emphasis on choral music. Students will have opportunities for conducting various ensembles during the course.

451 Piano Pedagogy and Literature

4 credits

A study of the materials and methods of piano literature and teaching techniques. Lectures will be given on materials, and there will be supervised practice teaching.

455 Vocal Pedagogy and Literature

4 credits

A study of the methods of solo voice techniques for studio and class teaching. This will include a historical study of solo voice literature from Elizabethan song through the 20th century.

190, 290, 390, 490 Special Studies in Music

195, 295, 395, 495 Internship in Music

398, 498 Research/Teaching

199, 299, 399, 499 Guided Independent Study

Applied Music

Applied music study is open to all students of the college at the special fee scale listed in the cost section of this catalog. Lessons are available on a half-hour or hour basis. Students majoring in music-performance may choose as areas of concentration piano, voice, guitar, brass, percussion, organ or woodwinds.

Ensembles

Ensembles are open to all students of the college. Students enrolled in performing organizations are required to participate in all performances of such organizations. All ensembles receive 1 credit.

St. Andrews Chorale
St. Andrews Chamber Singers
St. Andrews Chamber Players
St. Andrews Wind Ensemble

Music Lessons

000 Non-Credit
100 First Level of Lessons
200 Second Level of Lessons
300 Third Level of Lessons
400 Fourth Level of Lessons

The first digit of the course number represents the level of music lesson; i.e., students who wish to register for first level piano lessons should register for **Piano 161**, etc. The second digit refers to the applied area: 4 - guitar; 5 - voice; 6 - piano; 7 - organ; 8 - brass or percussion; and 9 - string or woodwind. The third digit refers to the term in which the lesson is given. Hour lessons receive 2 credits; 1/2 hour lessons receive 1 credit.

The following music courses satisfy breadth courses in the arts:

MUS 210
MUS 251
MUS 253

MUS 307

MUS 308

Additionally, **MUS 210** will satisfy the symbol systems.

Philosophy

Distinguished Professor Alexander; Professor Prust; Assistant Professor Throop (chair-person)

Major in Philosophy

Requirements of the standard major include 12 courses in philosophy, among them **Philosophy 210**. At least seven of these courses must be at the 300-400 level. In addition, each major must take **Philosophy 442** at least once.

Contract Major

In addition to the standard major, the philosophy program offers students options of designing and contracting a major which has an emphasis in some areas of study the student wishes to relate to philosophy (e.g. religion, politics, literature, physics,

history, etc.), or with a particular pre-professional emphasis (e.g. pre-law, pre-theology, etc.). The terms of these contracts are negotiated by the applicant and the program faculty; the only general requirements are that 1) they include a minimum of eight courses in philosophy at least five of which are at the 300-400 level, and 2) the contract include twelve courses at least seven of which are at the 300-400 level.

Minor in Philosophy

Requirements for a minor are six courses in philosophy at least three of which are at the 300-400 level.



Honors in Philosophy

A major may receive the designation of "honors in philosophy" upon meeting the following criteria:

- achieving a cumulative grade average of 3.0 or better on all course work and of 3.3 or better in courses in the major;
- completing two four-credit guided independent studies with members of the program faculty;
- under normal circumstances, taking **Philosophy 442** in both the junior and senior years;
- presenting an honors thesis or project in a comprehensive oral examination before an examining committee comprising at least one faculty member in the philosophy program, one faculty member outside the philosophy program and one additional outside examiner.

Courses in Philosophy

100 Introduction to Philosophy

3 credits

Consideration of basic problems, such as the nature of reality, the possibilities of human understanding, the relation of the mind to physical existence, the difference between right and wrong, the relation between the individual and society. Recommended as a first course in philosophy.

210 Introduction to Logic

3 credits

A study of traditional and Aristotelian logical structures and categories including the necessary components of an argument, analyses presented in ordinary language, recognition of arguments containing informal fallacies, and inductive or inferential processes.

212 Ethics

3 credits

A study of question about moral judgments, such as whether what one considers good is entirely relative to one's culture and upbringing, or whether there is a rational basis for such judgments. The course will also examine a variety of contemporary moral problems such as concern about abortion, uses of the environment, treatment of animals, war and pacifism, and treatment of the terminally ill.

213 Aesthetics

3 credits

A study of the philosophy of the fine arts. The course will examine such issues as what standard, if any, we use when we judge something beautiful, whether beauty and

truth are related, whether the same standards of criticism apply to all the arts and what happens when we come to appreciate a work of art.

214 Philosophy of Religion

3 credits

A survey of the various philosophical investigations of religious experience and truth claims. Rational, empirical, existential and analytic approaches will be explored for their answers to a number of problems, such as the basis for religious truth claims, the relationship of religious truth to historical and scientific truth, the validity of arguments for the existence and nature of God, and the differences between Eastern and Western religious thought.

216 Existentialism

3 credits

The philosophy of existence, studied through the works of such thinkers as Nietzsche, Sartre, Jaspers, Berdyaev, Ortega, Buber and Camus. Existentialism in its influence in political theory, literature and the fine arts is also treated.

217/317 Philosophy of Mind

3/4 credits

A critical examination of various problems relating to the nature of our minds and our mental states. Topics to be discussed include the emotions, the unconscious, perception and the relation of the mind to the body. Recommended for students in psychology and biology who want to reflect on the conceptual problems generated by research in these disciplines.

218 Social and Political Philosophy

3 credits

An examination of the theories of society which are original and most influential. The course emphasizes the essential structures of these theories, which are contemporary as well as classical. Both problem-oriented and historically-oriented methodologies will be used in the study.

227/327 Religions and Philosophies of the East, crosslisted as Religion 217/317. (see *Religion* for description)

231 Business Ethics

3 credits

An analysis of the different positions people take on the moral issues involved in the conduct of business. Topics such as work safety standards, preferential hiring, responsibility for the environment, truth in advertising, government regulation and consumer rights will be examined. In addition, the course will study several important theories of economic justice.

301 The Beginnings of Philosophy

4 credits

The history of Hellenic and Hellenistic philosophy from its beginnings in myth and religion. Emphasis upon the major thinkers and movements of the Greek world, beginning with the pre-Socratics, and concluding with philosophy in Roman times. Concentration upon Plato and Aristotle.

302 Jewish, Christian and Islamic Philosophy

4 credits

A study of philosophy as created by Jewish, Christian and Islamic cultures and of the problems posed for philosophy by the monotheistic faiths. This course will consider the background and contribution of such men as Augustine, Anselm, Averroes, Maimonides and Thomas Aquinas. Several modern thinkers in these religious traditions will also be considered.

303 Modern Philosophy and the Scientific Revolutions

4 credits

A study of the impact of modern science on Western philosophy and the response of major thinkers to change in views of the world and humanity. The course concentrates on the major figures from Descartes to Kant.

304 Recent Philosophy and the Social Revolution

4 credits

A study of the development of thought from Kant to Hegel and of the varieties of reaction to Hegelianism, including Kierkegaard, Nietzsche and Marx. Some consideration will be given to other nineteenth century philosophers.

315 Philosophy of Science

4 credits

A systematic and critical study of the methodologies of the social and natural sciences, including an analysis of their presuppositions, sources, concepts and aims. The course also examines problems about the intellectual and ethical limitations of science: to what extent does science give us objective knowledge and to what extent should research be restrained on ethical grounds? Recommended for students in the humanities and sciences who wish to reflect on the scientific enterprises.

323 Marxian Political Analysis

4 credits (See Politics 323)

333 Philosophy of Law

4 credits

An analysis of the major philosophical issues concerned with legal concepts such as "liberty," "justice," "responsibility" and "law" itself. The course will study historically significant treatments of these topics as well as current discussions of them.

Prerequisite: at least one course in philosophy.

335 Theory of Knowledge

4 credits

An investigation of fundamental questions pertaining to the nature of truth, knowledge and perception. Material will be drawn primarily from contemporary authors such as Chisholm, Kuhn and Quine; but it will be placed in the context of the traditional theories of knowledge advanced by Descartes, Hume and Kant.

403 Phenomenology

4 credits

An examination of the origins of this influential contemporary philosophy in Husserl and a study of its development in other contemporary thinkers such as Max Scheler, Maurice Merleau-Ponty, Erwin Straus, Paul Ricoeur and John Wild.

408 Religions of South Asia

4 credits (See Religion 408)

434 Contemporary Anglo-American Philosophy

4 credits

An investigation of the main currents of Anglo-American thought in this century. We will read Russell, Wittgenstein, Ayer, James and others, and focus on the central questions they addressed: What is the nature and function of language? What is understanding? What is the nature and purpose of philosophy?

442 Junior/Senior Seminar

1 credit

A one-credit seminar course for majors and minors in which students will read and discuss some new, important contribution to philosophy, usually a recent book by a well-known philosopher. This course will enable students to relate their philosophical knowledge to ideas which are on the cutting edge of contemporary philosophy.

190, 290, 390, 490 Special Studies in Philosophy

195, 295, 395, 495 Internships in Philosophy

199, 299, 399, 499 Guided Independent Studies in Philosophy

Philosophy 210 satisfies the symbols system breadth requirement; all other philosophy courses satisfy the humanities breadth requirement.

P:



Religion

Professor Walters (Chairperson); Assistant Professor Bringle

Major in Religion

Requirements for the regular religion major include 10 courses, of which six are required. These six include:

- a. **Religion 100** (in certain circumstances, this may be waived by permission of the department).
- b. One course in biblical studies (101, 192, 303, 304, or Intro. to Hebrew Bible)
- c. One course in church history (307, 308)
- d. One course in a tradition other than Christianity (217/317, 408, Intro. to Judaism)
- e. One course in religion and culture (210/310, 213, 410, religion and literature, etc.)
- f. One course in theological reflection (202, 401).

Four additional courses are electives. At least six courses must be 300-400 level courses.

Contract Major

In addition to the regular major, the religion program offers students options for designing and contracting a major which has an emphasis in some area (or areas) of study the student wishes to relate to religion (e.g. philosophy, psychology, politics, history, literature, art, etc.). Specific courses which define the "terms" of these contracts are determined by the student in consultation with a member of the religion faculty and with approval of the chairperson of the religion program. The only general requirements are

that 1) they include a minimum of six courses in religion at least three of which are at the 300-400 level, and 2) the contract include ten courses at least six of which are at the 300-400 level.

Minor in Religion

A minor in religion will consist of six courses; three must be upper level courses.

Internships

Combining supervised off-campus work in institutions such as churches, hospitals and social service agencies with readings, reports and conferences with a faculty advisor, internships in the field of religion offer unique opportunities to combine theory and practice. These special educational experiences are open to qualified students and may be arranged with any member of the religion faculty. They must be approved by the chair of the religion program, the chair of the HFA division and the director of internships.

Courses in Religion

Courses on the 300-400 level are designed for juniors and seniors. Others may be admitted to these courses by special permission from the instructor.

Honors in Religion

A major may receive the designation of "honors in religion" upon meeting the following criteria:

- achieving a cumulative grade average of 3.0 or better on all course work and of 3.3 or better in courses in the major,
- completing one four-credit guided independent study at the level of **497** (normally during the fall term of the senior year) and a second guided independent study during the spring term of the senior year in conjunction with a weekly seminar of other candidates for honors in religion,
- presenting an honors thesis or project on a topic acceptable to the program faculty,
- defending the honors thesis or project in a comprehensive oral examination before an examining committee comprising at least one faculty member in the religion program, one faculty member outside the religion program and one additional outside examiner.

Courses in Religion

100 Quest for Religious Meaning

3 credits

The field of religion explores the ultimate questions of human being, meaning and value. How did the world come to be as it is? Why is there pain and suffering? Is there a plan for individual life, for human history, for the world? Is the cosmos in which we live fundamentally hostile, neutral, or caring and supportive of our being? This course examines a variety of methods used for responding to such questions within the academic study of religion. It inquires into major themes of various religions and addresses critical issues in religion and ethics with regard to their impact upon our lives today. Recommended as a first course in religion, this course is taught by the staff of the religion program as well as guest lecturers and discussion leaders invited from related disciplines.

101 The Old Testament Today

3 credits

Migrations and invasions, armaments and alliances, war and peace, covenant-making and covenant-breaking, sex roles and family life, faith and unfaith, poetry, prophecy and praise—all of these topics, and others as current as the morning newspaper, are the same issues which one encounters in a study of the history, literature and religion of the Hebrews, i.e. the Old Testament. Historical reflection, literary analysis and theological interpretation are interwoven to form the methodology for this course.

102 The New Testament Today

3 credits

Jesus of Nazareth, his teaching and his actions, the cultural background (Jewish and Greco-Roman) of early Christianity, the history, beliefs and questions of the first-century church as these are disclosed in the books of the New Testament—these are the topics studied in this course. Using the standard methods of modern biblical study, students will explore these topics and their possible relevance for personal identity, religious belief and ethical practice in today's pluralistic world.

202 The Christian Story (Introduction to Christian Beliefs)

3 credits

The Christian story offers a powerful account of how God has chosen to relate to human beings from our original creation through our history of alienation to our climactic atonement and reconciliation with the divine. This course explores the network of beliefs interwoven with that story, examining different ways in which the key doctrines of Christianity—its central character, settings and plot—have been interpreted. The goal is to arrive at an enriched understanding of the complex question: What is the Christian faith?

210/310 Religion and Psychology: A 20th Century Dialogue

3/4 credits

An exploration of the relation between religion and psychology articulated through selected representative theologians and psychologists in the twentieth century. Following a brief general orientation to the subject, the course will focus mainly upon the interchange between protestant forms of the Christian faith and the Freudian, Jungian, Humanistic, Transactional Analytic and Behavioristic schools of psychology. Cross listed as Psychology 210/310

213 Social Issues in Ethical and Religious Perspective

3 credits

Modern persons face a number of difficult issues: changing roles for women and men, shifting lifestyles and sexual orientations, problems of racial and ethnic justice, questions of ecology, euthanasia, energy, abortion, pornography, crime and war. This course will focus on a few such issues of pressing ethical concern, exploring ways in which they meet with informed and active response from individuals and communities of faith.

217/317 Religions and Philosophies of the East

3/4 credits

An introduction to the basic beliefs and practices of several of the religious and philosophical traditions of the non-Western world in the light of their historical origins and developments and with attention given to their continuing significance for understanding world culture and international events today. At least three of the following will be studied: Hinduism, Buddhism, Taoism, Confucianism and Islam. This course may be counted as a philosophy course in the philosophy major.

303 Synoptic Gospels

4 credits

This course will explore the historico-cultural background, the literary character, and the religious themes of the New Testament gospels of Mathew, Mark and Luke with primary focus on the earliest of these, the Gospel according to Mark.

304 Old Testament Studies

4 credits

Historical, literary and theological studies of various writings of the Old Testament. One of the following will be taught each year according to student demand and special interests of religion majors: A. The Pentateuch; B. Hebrew prophets; C. Psalms and Wisdom literature; D. Apocalyptic literature.

307 Christianity Before 1500

4 credits

What we in the contemporary world virtually take for granted as “Christianity”—the creeds we recite, the doctrines we profess, the ways we worship in our churches and interact with our surrounding communities—were often topics of heated controversy during the earliest years of Christian existence. This course investigates the origins of Christian thought and practice up to the sixteenth century, exploring major thinkers and issues of debate.

308 Christianity Since 1500

4 credits

This course explores the people, forces and ideas giving shape to Christianity in the modern world. People whose writings will be studied include Martin Luther, John Calvin, Friedrich Schleiermacher and others. Ideas to be investigated include the relationship between faith and reason, the interaction of religion and politics, the question of free will, the nature of salvation and the meaning of the sacraments.

401 Modern Christian Theology

4 credits

Through the works of major twentieth century theologians, this course analyzes a variety of trends in modern Christianity including such perspectives as neo-orthodox, process, and feminist thought. The emphasis will be on understanding theology as a critical and systematic discipline wherein affirmations about the nature of God and humanity entail logical, philosophical, doctrinal and ethical consequences.

403 New Testament Studies

4 credits

Historical, literary and theological studies of various writings in the New Testament. One of the following will be taught each year according to student demand and special interest of religion majors: A. *The Life and Letters of the Apostle Paul*; B. *Johannine Literature*; C. *General Letters*; D. *The Apocalypse (Revelation) of John and the Letter to the Hebrews*.

408 Religions of South Asia

4 credits

A study of the many diverse religions and philosophies of the Indian sub-continent over a period of 5,000 years including Hinduism, Jainism, Buddhism and Islam. Ancient Scriptures read in this course include the Bhagavad Gita and excerpts from the Vedas, Upanishads and Buddhist, Jainist and Islamic texts.

410 Religion in the Contemporary World

4 credits

In the latter half of the twentieth century, religion is confronted with a number of challenges: pluralism and the need for interfaith understanding; the increased involvement of religious movements, both conservative and liberal, in political activity; the tragedies of human existence which lend new urgency to questions of meaning and ultimate truth. This course focuses on a few such challenges from the perspective of major thinkers of various religious traditions, attempting to discern intellectually and morally responsible ways to live as persons of faith and hope within the crises of the contemporary world.

497 Honors in Religion

190, 290, 390, 490 Special Studies in Religion

(For example: religion and art, religion in literature, women and religion, etc.)

199, 299, 399, 499 Guided Independent Study in Religion

The Jewish Chautauqua Society Resident Lectureship in Judaic Studies

Introductory courses on Jewish history, beliefs and practices and other courses on various aspects of Jewish life and thought are offered on a regular basis by a visiting rabbi. This lectureship is funded by the Jewish Chautauqua Society founded in 1893 by Rabbi Henry Berkowitz.

Internships for variable credit may also be arranged with local churches, social service agencies, etc.

Seminars off-campus and abroad may also carry academic credit—in such places as New York City; Geneva, Switzerland; Japan and St. Andrews in Scotland.

Students wishing to study New Testament Greek may take **Greek 101, 102, 201 and 202**. These courses are offered in the department of foreign languages. See *Foreign Language* listings.

All religion courses listed satisfy the humanities breadth requirement.



Theatre

Associate Professor Beyer (Chairperson); Assistant Professor Burgess

Major in Theatre Arts

A major in theatre arts will consist of 41 credit hours in theatre courses. (See course requirements listed below under *Theatre Arts Major*.)

In addition to the standard major, the theatre department offers students options of designing and contracting a major which has an emphasis in some area of study the student wishes to relate to theatre (e.g. music, English, literature, art, religion, physical education, history, etc.) or with professional emphasis (children's theatre, religious drama, performance, acting/directing, scenic design, arts and recreation, etc.).

The terms of these contracts are negotiated by the applicant and the program faculty; the only general requirement is that they include a minimum of eight courses in theatre at least five of which must be at the 300-400 level.

Minor in Theatre Arts

Students minoring in theatre are required to take at least seven courses in theatre, at least three of which must be at the 300-400 level. Courses will include 201 and 311. The electives will be chosen in consultation with the faculty.

Theatre Arts Major

Required Core Courses

201	Introduction to Theatre	3 credits
203	Acting I	3 credits
205	Stagecraft	3 credits
241	Introduction to Design	3 credits
311	History of the Theatre	4 credits
312	Dramatic Literature	4 credits
181	Laboratory Experience	1 credit
381	Laboratory Experience	1 credit
TOTAL		22

Major Electives

Performance Courses (One of the following)

303	Acting II	4 credits
404	Directing	4 credits
TOTAL		4

and

Production Courses (One of the following)

341	Theatre Production Management	4 credits
411	Advanced Design	4 credits
TOTAL		4

and

(Three of the following, at least two from 300/400 level)

103	Public Speaking	3 credits
231	Principles of Script Analysis	3 credits
245	Oral Interpretation	3 credits
307	A History of the Motion Picture	4 credits
320	Playwriting	4 credits
	Winter Term Theatre Course	3/4 credits
399/499	Guided Studies in Theatre	4 credits
398/498	Research/Teaching Practicum	4 credits
TOTAL		11

Performance Courses

Acting I
Acting II
Directing
Oral Interpretation

Dramatic Literature

Principles of Script Analysis
History of the Theatre
Dramatic Literature
Playwriting

Production Courses

Intro. to Design
Advanced Design
Theatre Production Mgt.
Stagecraft

Other Theatre Courses

Public Speaking
Introduction to Theatre
A History of the Motion Picture
Production/Performance Laboratory
Special Studies
GIS
Research/Teaching

Courses in Theatre

103 Public Speaking

3 credits

An introduction to public speaking. The student will prepare and deliver a series of informative and persuasive speeches as well as participate in voice and diction exercises, extemporaneous speaking and critical analysis of speeches.

181 Production Experience in Performance

1 credit

Practical applications and extension of theory and technique covered in theatre courses in performance and production. Experiences may range from acting to stage management to crew or technical work.

201 Introduction to Theatre

3 credits

An investigation of the production process from the author's imagination to

closing night. Designed to increase the student's aesthetic and critical appreciation of the dramatic art through study of scripts, production styles and the contributions of theatrical artists.

203 Acting I

3 credits

An introduction to acting with an emphasis on improvisation, voice and diction, and characterization.

205 Stagecraft

4 credits

This course seeks to familiarize the student with the basic skills of stagecraft. Set construction, prop construction, technical terminology and basic lighting techniques comprise the major emphasis of this lecture/lab course. This course will include regular lab experience and production experience in addition to classroom activities.

231 Principles of Script Analysis

3 credits

A survey of methodologies of script analysis for theatrical purposes. Students will examine the underlying assumptions of (among others) generic, structural, thematic and associational approaches to scripts, and will apply these methodologies practically in written analysis of scripts for class.

241 Introduction to Design

3 credits

The course will cover the theory, practice and style of costume, lighting, makeup and scene design. The student will receive practical experience in at least one of these design areas working on main-stage productions.

245 Oral Interpretation

3 credits

Oral interpretation of poetry, prose and dramatic literature. Student experiences include the analysis, preparation and delivery of selections with emphasis on the development of an expressive, flexible voice.

303 Acting II

4 credits

The student will concentrate on script analysis, scene study and characterization. The primary focus will be the development of a methodology and the practice of techniques appropriate for performance in a variety of theatre forms. Prerequisite: **Acting I** or permission of instructor.

307 A History of the Motion Picture

4 credits

An introduction to the film as an art form in the twentieth century. Films by directors such as Griffith, Eisenstein, Lang, Renoir, Bergman, Truffaut and Welles will be seen, analyzed and discussed so that the student can gain an awareness of the history of the film and an ability to view films critically.

311 History of the Theatre

4 credits

An introduction to the study of theatrical production in previous ages. Through research, lectures and discussions the class will examine theatre practices from the Greeks to the moderns with the focus on the actor and the elements (architecture, staging methods, scenery, etc.) that support him or her as a performing artist. Prerequisite:

Theatre 201 or permission of the instructor.

312 Dramatic Literature

4 credits

A survey of play scripts from the ancient Greek to the contemporary period. The class will read, analyze and discuss various styles (Greek, Elizabethan, Neoclassic, Romantic, Realistic, Absurd, etc.) of the major forms of drama (tragedy, comedy and melodrama). (Also offered as **English 312**)

320 Playwriting

4 credits

A beginning course in writing scripts for theatre performance. The course will provide the student with an understanding of dramatic structure and will create a critical environment for the writing of plays. Each student will read from works written and will analyze works prepared by classmates. There will be public performance of some of the plays if possible. (Also offered as **English 320**)

341 Theatre Production Management

4 credits

A study of the principles and practices of stage management and production management as practiced in academic and professional theatre. The student will study, create and experience the wide range of duties for the production of a play and the operation of a theatre. Prerequisite: **Introduction to Theatre** or permission of instructor.

342 Advanced Production Experience in Performance

1 credit

Practical applications and extension of theory and technique covered in theatre courses in performance and production. Experiences may range from acting or directing to stage management or production to technical or design work.

343 Advanced Production Experience in Production

1 credit

Practical applications and extension of theory and technique covered in theatre courses in performance and production. Experiences may range from acting or directing to stage management or production to technical or design work.

381 Production Experience in Production

1 credit

Practical applications and extension of theory and technique covered in theatre courses in performance and production. Experiences may range from acting to stage management to crew or technical work.

404 Directing

4 credits

An introduction to the theories and practices of play direction. The class will discuss the tasks of directing in conjunction with workshop scenes to be staged in the class.

411 Advanced Theatre Design

4 credits

The history of scenic/lighting and costume design as well as individual period design problems will be covered. The student will design and execute floor plans, renderings, models, plates, plots and schedules in a range of styles. Prerequisite: Stagecraft or permission of instructor.

190, 290, 390, 490 Special Studies in Theatre

Topics for special studies have included: **Pantomime, Puppet Theatre, Scene Painting, Make Up and Experimental Theatre.**

199, 299, 399, 499 Guided Independent Study in Theatre

398, 498 Research/Teaching Practicum


The following theatre courses satisfy arts breadth requirements:

Theatre 103, 201, 203, 205, 241, 245, 320, 404

The following theatre courses satisfy humanities breadth requirements:

Theatre 231, 307, 311 and 312.





Mathematical, Natural, & Health Sciences

Chairperson: Allen C. Dotson

Departments

Biology
Chemistry & Physics
Health, Physical Education and Recreation
Mathematics

Majors

Allied Health
Biology
Chemistry
Chemical Physics
Mathematics
Mathematics with a concentration in Computer Science
*Natural Science and Mathematics, with a possible
concentration in
Chemistry, Computer Science or Physics
Physical Education

***Available only to students in dual degree
program**

Health Careers Advising

St. Andrews provides preprofessional training to students desiring to enter professional schools in various health professions. St. Andrews provides a quality beginning for those students who wish to embark on a course of study involving both professional training and a small college, values-oriented, liberal arts education.

The MNHS division provides advising services to those students who wish to prepare for admission to professional schools in the areas of medicine, dentistry, veterinary, or one of the allied health professions (hospital administration, medical technology, optometry, occupational therapy, physical therapy, respiratory therapy or physician's assistant). Students interested in these professions may obtain advising regarding admissions requirements, preparation for admissions tests (MCAT, DAT, VAT, etc.) and application for admissions to appropriate professional schools. They will also be assisted in the planning and completion of a preclinical internship in the chosen area. This internship (often occurring in the winter term, where a one-month full-time effort is possible) offers the student an opportunity to examine the profession, testing their personal skills and values against the daily demands of the profession.

The above described advising services are available to all St. Andrews students regardless of academic major. There are no required majors for admission to professional schools in the health sciences. While the student must complete the specific courses required for admissions to a particular school, academic major is a matter of personal choice and should reflect academic interests and alternate career goals. Premedical, predental and preveterinary are not majors, they are career goals; therefore, students in these areas should expect to choose a major from one of the college's disciplinary offerings. While the college offers an allied health major (see below), students preparing for allied health careers are welcome to choose a disciplinary major wherever possible. Individualized courses of instruction, coupled with a four-year program designed to broaden the student's career options, have enabled a majority of qualified graduates to pursue the professional training of their choice.

Allied Health Major

The allied health major is a multidisciplinary program designed to prepare the student for clinical training in one of the allied health professions. It leads to the BA degree in allied health. This is a contract major that is most valuable to those students whose professional school requirements are so diverse as to make a conventional academic major difficult or impossible. The allied health major consists of 12 to 14 courses, of which one-half are junior-senior level courses. All majors are required to take a core of five courses consisting of **Biology 211 and 212, Biology 207, Mathematics 202 and Psychology 201**. The remaining courses are selected from course offerings listed in this catalog. The entrance requirements of the graduate or certificate program determine which courses are selected. The allied health contract is developed in conference with an academic advisor and is approved by the allied health advisor and the chair of the division of mathematical, natural and health sciences.

Dual Degree Program in Engineering

Students who follow a prescribed schedule can receive a bachelor's degree from St. Andrews and a bachelor's degree in a field of engineering from Georgia Institute of Technology at the end of five years, the first three of which are spent at St. Andrews. Since the sequence of courses to be taken during those three years follows a relatively tight schedule, entering students interested in this possibility should consult with the dual-degree advisor before registering. Transfer students interested in the program should also contact this advisor as soon as possible.

Students who successfully complete both phases of the dual degree program receive, from St. Andrews, a bachelor's degree in natural science and mathematics. For this major (which is available only to such students), the required courses are **Chem. 201, 206** (structure and reactivity, equilibria), **Phys. 211, 212** (general physics I, II), **Math 115, 201, 202, 310, 321, 340** (pre-calculus, calculus I, II, multivariable calculus, matrix algebra, ordinary differential equations), and **Computer Science 110** (introduction to computer science) or equivalent experience.

In addition, three electives are chosen from among the 300-400 level courses in mathematics, computer science, chemistry and physics, plus **Math 205** (statistics) and **Computer Science 202** (artificial languages). Concentrations in computer science, chemistry and physics are possible, by choosing all three electives in that respective discipline. Substitution of one of the permitted electives for one of the required courses may be approved by the dual-degree advisor.

Biology

Associate Professors Applegate, Torres
Assistant Professors Melvin (Chairperson), McCracken

Major in Biology

The biology major is a contract major. The contract is a listing of courses that the student must take to complete the biology major. This listing of courses is selected by the student with the aid of a faculty advisor. After approval of the contract by the department and division chairs the student is officially a biology major. The contract includes a core sequence (**Biol. 211, 212, 327**) required of all majors. The contract will contain five additional upper level biology courses. These courses will be selected according to student interests, advisor's recommendations regarding appropriate preparation for career goals and certain rules which the biology faculty have implemented to insure breadth in the education of biology majors. The contract also requires certain supporting courses. The supporting course requirements for the biology B.S. degree are stated elsewhere in this catalog (see general information on the bachelor of science degree). The biology B.A. degree requires **Chem. 201 and 206 and Math 205** as well as one to four supporting electives. This degree enables the student whose goals do not involve graduate school or professional school in the health professions to select a more general course of study or to select supporting courses specific to their career goals.

With the flexibility of contracts and the option of either B.S. or B.A. tracks, students with diverse career goals from medical doctor to secondary school teacher, from molecular biologist to wildlife biologist, from botanist to veterinarian and from physical therapist to plant pathologist are able to select and appropriate course of study that leads either to their chosen career or to the next appropriate level of preparation on the way to that career.



Biology Minor

A minor in biology requires completion of the introductory courses (**Biol. 211** and **212**) and four additional biology courses, of which three must be at the 300 level or above. The biology minor provides an opportunity for the student with an interest in biology to design and complete a course of study while also pursuing their primary interests. The biology minor in combination with many major (e.g. business, English, journalism, etc.) contributes to broader career prospects for the student.

Honors in Biology

A biology major may receive a B.A. or B.S. degree in biology with the designation "honors in biology" upon selection by the biology faculty and certification by the dean of the college and after successful completion of the following:

- a 3.3 GPA in biology courses and a 3.0 cumulative GPA,
- a minimum of eight credits and not more than 12 credits of independent study during at least two regular terms with grades of 3.3 or better in each independent study (designated as 497),
- an honors research thesis on a topic approved by the biology faculty,
- present a seminar on the honors research topic of at least 30-minutes duration to all interested members of the college community,
- defense of the honors thesis in a comprehensive oral examination before all members of the biology department.

Application for the "honors in biology" designation must be completed and approved by the regular date for advanced registration for the first regular term of the student's senior year.

Independent Study

Besides the courses described below the biology faculty offers numerous opportunities for individualized, independent activities for biology majors. These include **special studies in biology, teaching practicum in biology and guided independent studies** (undergraduate research projects).

Special studies are courses which are not regularly taught but which are offered when that unique combination of faculty and student interests suggests that an important learning experience may occur. Since these studies are usually offered above the normal faculty teaching load, it is expected that class sizes will be small and that students will assume greater responsibility for the preparation and conduct of the course.

The biology faculty is prepared to teach a wide variety of special studies such as **economic botany, southeastern ecology, chromosomes, evolution, pollination biology, biochemical genetics, behavioral ecology and ecological energetics.**

The **teaching practicum in biology** provides those students who are preparing to be secondary school biology teachers to gain experience by performing as a teaching assistant in introductory biology courses. The practicum is also an excellent opportunity for those students who are preparing for graduate and pre-professional school admissions tests such as the GRE, VAT, DAT and MCAT to enhance their preparation for the biology portions of those tests by working in the tutor/mentor role in introductory biology courses.

The **guided independent study** is an invitation to undergraduate research. The student who is interested in research should go to that member of the biology faculty whose research interests most closely match his/her own and inquire about research possibilities. If the faculty member judges that the student's preparation and motivation are sufficient to sustain an independent study, the student and the faculty member will develop and describe a research project. After approval by the biology faculty and the division council, the project becomes an official **guided independent study**. Upon completion of the project, the student will have acquired hands on experience with experimental design, data collection and data analysis and with motivation, perseverance (and a little luck) the student may also have an opportunity to present their research at a state or national meeting or add a publication to their resume.

With the above opportunities plus regular seminars presented by outside speakers and club activities provided by **Tri Beta** (the honor society for undergraduate biology students), the St. Andrews biology major has an excellent opportunity to carry her/his education beyond the level of conventional classroom activities to whatever level his/her personal skill and motivation allows.

Courses in Biology

207 Human Anatomy and Physiology

4 credits

An introduction to human biology covering anatomical structure and function of various systems: skeletal, muscular, digestive, endocrine, nervous, urinary, reproductive and integumentary. Intended for physical education, education, allied health and social science students. Lecture: three hours; laboratory: three hours.

Offered alternate academic years.

211 Concepts in Biology I

4 credits

A concept-oriented course in biology that deals with the evolution, function and form of life through the development of the tissue level of biological organization. Lecture: four hours; laboratory: three hours.

Offered each fall term.

212 Concepts in Biology II

4 credits

An investigation of the genesis of diverse forms and functions in living organisms, interactions among plants and animals and their environment will also be studied.

Lecture: four hours; laboratory: three hours.

Offered each spring term.

305 Embryology

5 credits

Chemical, physical and morphological aspects of growth and development as exemplified by plants and animals. The concepts and relationships of fertilization, growth, differentiation, morphogenesis, systems control and feedback, and organogenesis are discussed. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or consent of the instructor.

Offered in fall term of even academic years.

307 Ecology

5 credits

An introduction to the basic concepts of environmental biology especially emphasizing population problems, ecosystem dynamics and the mechanisms of evolutionary development. The laboratory is field oriented and designed to quantify the environment through vegetation and ecological sampling procedures. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or consent of instructor.

Offered fall term of odd years.

321 Plant Diversity

5 credits

A study of the major plant divisions with emphasis on anatomy, morphology and evolution of living and extinct forms of algae, fungi, mosses and vascular plants. Laboratory is designed to reinforce lecture material. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or consent of instructor.

Offered fall term of even academic years.

322 Histology

5 credits

A detailed study of the tissues of vertebrate animals. The major thrust of the course is toward the identification and understanding of the functions of the tissues of the major organ systems of the vertebrate body. Additional information is offered on a few of the pathological states of human tissues. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 211** or consent of instructor.

Offered spring term of even academic years.

327 Genetics

5 credits

The study of hereditary characteristics as determined by eliminating units transmitted between generations in uniform predictable fashion. Topics treated in lecture include classic Mendelian genetics, bio-chemical genetics, developmental genetics and molecular genetics. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 211, 212** or consent of instructor.

Offered each spring term.

341 Vascular Plant Systematics

5 credits

A course designed to review the higher vascular plants in respect to their family characteristics; speciation and evolution. Attention will also be given to the major current systematic research methodologies. The laboratory is field oriented and geared towards species identification. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or consent of instructor.

Offered spring term of even academic years.

351 Animal Physiology

5 credits

The study of animal function with emphasis on integration and homeostatic mechanisms. Both basic physiological mechanisms and adaptive modifications will be considered. Lecture: four hours; laboratory: three hours.

Prerequisites: **Biology 212** and **Chemistry 201** or permission of instructor.

Offered fall term of even academic years.

353 Vertebrate Zoology

5 credits

A systematic study of vertebrates with emphasis on evolution, physiology, behavior and ecology. The laboratory is devoted to systematic field and experimental studies. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or permission of instructor.

Offered spring term of odd academic years.

355 Animal Behavior

5 credits

The modern discipline of animal behavior as a synthesis of ethology, comparative psychology and population ecology will be studied. The ecological and evolutionary aspects of topics such as reproductive behavior, territoriality and predator-prey interactions will be considered. An introduction to sociobiology will also be provided. Labs will involve both experiments and field observations. Lecture: four hours; laboratory: three hours.

Prerequisite: **Biology 212** or permission of instructor.
Offered spring term of alternate academic years.

401 Phytogeography

5 credits

A study of the major plant communities, their composition and evolution. Also involved is discussion of paleoclimatologic and paleogeographic factors as they pertain to plate tectonics, climatic changes and island biogeography as causal agents of past plant migration and current disjunct distribution of plant species. The laboratory is field oriented and designed to study southeastern plant communities as to their distribution and species composition. Lecture: three hours; laboratory: four hours.

Prerequisite: **Biology 212** or consent of instructor.

Offered spring term of odd academic years.

406 Comparative Vertebrate Anatomy

5 credits

This course is a comparative study of the homologous anatomical features of fish, amphibians, reptiles, birds and mammals. These anatomical studies attempt to illustrate the commonality of vertebrate body plans as well as probing the rich variety of survival strategies exemplified by differences in vertebrate structure. Lecture: four hours; laboratory: three hours.

Prerequisites: **Biology 212**, or permission of instructor.

Offered fall terms of odd academic years.

412 Invertebrate Biology

5 credits

A study of animals without backbones and their adaptation to the vicissitudes of life. The major thrust of the course will be in the area of marine invertebrate biology. Lecture: four hours; laboratory: three hours.

Prerequisites: **Biology 212**, or consent of instructor.

Offered spring term of odd academic years.

419 Endocrinology

5 credits

A study of the physiological and behavioral aspects of endocrine control systems. Laboratories will involve surgical or biochemical modifications of systems and monitoring of subsequent physiological and behavioral alterations. Lecture: four hours; laboratory: four hours.

Prerequisites: **Biology 212, 351** or permission of instructor.

Offered fall term of odd academic years.

422 Research Seminar

4 credits

A course for students who have successfully completed at least one term of

supervised research. The student will be expected to continue the on-going laboratory or field research and prepare an extensive literature review. Oral presentations (seminar format) of the literature review and results of the research will be given by students. The course will also consist of seminars given by outside speakers in the research areas pursued by the student.

Prerequisites: one term of supervised research and junior standing in the biology program.

Offered each year.

190, 290, 390, 490 Special Studies in Biology

Given sufficient student interest the biology faculty is prepared to teach a wide variety of special studies such as economic botany, southeastern ecology, chromosomes, cell biology, evolution, pollination biology, biochemical genetics, population biology, behavioral ecology and ecological energetics.

195, 295, 395, 495 Internship in Biology

199, 299, 399, 499 Guided Independent Study in Biology

398, 498 Biology Research/Teaching Practicum

Chemistry and Physics

Professor Blackburn; Associate Professors Boggs (Chairperson), Dotson; Assistant Professors Irvin (on leave), Lankford and Stephens

Major in Chemistry

The chemistry major is a contract major in which courses of study are selected by the student with the aid of a faculty advisor. Once a list of specific courses has been agreed upon, it is submitted to the entire chemistry faculty and subsequently to the division faculty for approval. Successful completion of the courses in the contract satisfies the degree requirements for bachelor of arts or bachelor of science.

The chemistry contract is centered upon the chemistry core of both lecture and laboratories. The lecture course sequence is the following: **201, 206, 311, 312** and **401**. The laboratory sequence includes **201Lab, 206Lab, 311Lab** and **312Lab** which are linked to their respective courses. The core laboratory sequence is normally capped in the senior year with **315** and **316** which are free-standing lab courses in their own right. The content of the rest of the contract will depend on the student's goals. With an appropriate set of additional choices, the contract can direct the student toward more specific career goals such as professional training (e.g. medicine, dentistry, pharmacy, law, business), graduate school (chemistry, biochemistry, pharmacology, environmental studies) or more immediate employment (lab technician, teacher, chemical sales).



The chemistry curriculum offers a concept-centered approach that cuts across many traditional divisions of chemistry. The laboratory program is designed to develop skill and self-reliance in the use of research-quality instruments and in standard chemical measurements, and to illustrate central chemical principles.

Minor in Chemistry

The following courses are required for a chemistry minor: **201, 206, 311** and **312**. The coordinate laboratories are also required: **201Lab, 206Lab, 311Lab** and **312Lab**. In addition, one course of each of the following two groups must be completed: group 1) chemistry **401** or **404**; group 2) physics **211** or computer science **110**.

Major in Chemical Physics

The interdisciplinary contract major in chemical physics has been designed by the division to open a field of study which is concerned with understanding matter at the most fundamental levels of inquiry. A student interested in this major consults with the faculty advisor in chemical physics to draw up a list of courses to be taken. The wide range of this coursework in physics, chemistry and mathematics provides the major with a background characterized by both breadth and depth.

Minor in Physics

The program also offers the physics minor, which requires the following courses: physics 211, 212, 305 and mathematics 310. In addition, either of physics 308 or physics 405 is required.

Courses in Chemistry

150 Chemistry, Observation and Measurement

4 credits

An introduction to chemistry is intended for students with relatively little previous experience with the field, or who feel the need to improve basic chemical and mathematical skills before undertaking chemistry 201-206. Basic laboratory procedures and measurements and the use of mathematics to model nature, with emphasis on practical mastery of basic scientific reasoning: atoms, molecules and moles, and their appearance and behavior in nature.

This course satisfies the breadth requirement in laboratory science.

201 Structure and Reactivity

3 credits

An introduction to the basic concepts of bonding and structure with emphasis on chemical periodicity and the atomic and molecular orbital theories of chemical bonding.

201Lab Structure and Reactivity Laboratory

1 credit

A laboratory experience designed to complement the structure and reactivity lecture. Emphasis is on quantitative as well as qualitative methodology. Experiments are chosen to illustrate concepts from the lecture.

206 Equilibria

3 credits

A treatment of inorganic and organic reactions in solution with emphasis on equilibrium calculations and applications to analytical chemistry.

Prerequisite: 201

206 Lab Equilibria Laboratory

1 credit

A companion laboratory for the equilibria lecture. Experiments examining chemical equilibrium, reaction rates and acid/base chemistry will be performed.

Prerequisites: 201, 201Lab

300 Geochemistry

4 credits

The Earth as a chemical system as a planet. The origin of the solar system, the organization of matter to form Earth, and its subsequent career. Cycles of elements through rock formation, weathering, streams and oceans; use of isotopes as tracers and in dating; biological mediation of chemical processes in nature; the structures and reactions of minerals; why the sea is salty.

Offered in fall term of even-numbered years.

Prerequisite: 206

311 Organic Chemistry I

4 credits

An introductory treatment of organic reactions with emphasis on structure-activity correlations.

Prerequisite: 206

311Lab Organic Chemistry I Laboratory

1 credit

Students will apply a selection of separation and analysis techniques to problems of resolving mixtures of organic molecules. In some cases the techniques will be used to obtain data that illustrate conclusions about the effects of structure on reactivity of organic molecules. Finally, a selection of experiments will require production of specific quantities of pure product. Analytical techniques will demonstrate the purity and identify the impurities.

Prerequisites: 206, 206Lab and corequisite 311.

312 Organic Chemistry II

4 credits

An integral continuation of 311, using reactions and concepts to build into the chemistry of aromatic systems and carbonyl-containing molecules. In addition the students will be introduced to the use of spectra for determination of structure.

Prerequisite: 311

312Lab Organic Chemistry II Laboratory

1 credit

Using and expanding on techniques learned in **311Lab**, students will explore in the laboratory the chemistry of aromatic rings and of carbonyl-containing molecules. The labs will include a selection of both synthesis and analysis-oriented experiments. In addition, two unknowns will be identified using systematic qualitative organic analysis. The term will finish with a three-week period devoted to an individualized set of choice experiments.

Prerequisite: **311Lab**, Corequisite **312**.

315 Advanced Laboratory Techniques

3 credits

Experiments will have the students using instrumentation and manipulations not encountered in previous laboratory courses. Experimental work will provide a first look at physico-chemical phenomena prior to **Chemistry 401**, and will emphasize increasing independence, beginning with well-documented instrumental analyses.

Prerequisite: **312**, **312Lab** or permission of instructor.

316 Introduction to Research Techniques

3 credits

This course is divided into two portions. During the first, the students will generate a selection of brief research projects usually under the guidance of one of the chemistry faculty. During this first period the student will learn and use computer-assisted and other literature search techniques to set up a reference base for the final project choice. The second portion of the program, usually 6 weeks, will be the laboratory pursuit of the project.

Prerequisite: **315**.

398 Chemistry Teaching Practicum

3 credits

Students will assist faculty with teaching **150**, **201** or **206** or in unusual cases **311** and **312**. They will participate in designing homework and in-class exercises, in preparing and running the laboratories and in designing new experiments. Each student will be responsible specifically for critiquing lab reports and for running regular study group meetings. The candidates will have successfully completed at least one course above the one in which they will be assisting. Selection by instructors of the respective courses will be based upon the candidates' experience and the excellence of their record as students in chemistry. This course would be ideal for (but not necessarily limited to) students whose career goals include having an active and working knowledge of chemistry fundamentals. The best way to learn fundamentals is to try to teach them to someone else.

Prerequisite: approval of the instructor; form available in registrar's office.

400 Bonding and Structure

4 credits

The quantitative aspects of the theories of bonding and structure are emphasized. Quantum mechanics at an introductory level is used to examine progressively more complex systems. Theoretical and practical aspects of spectroscopy are explored in the determination of molecular structures.

Prerequisites: **Chem 201, Math 202, Phys 212**

Offered: fall term of odd-numbered years.

401 Thermodynamics and Kinetics

4 credits

Elementary thermodynamics and kinetics are approached through a study of energy and entropy changes for macroscopic phenomena, rate laws, and reaction mechanisms

Prerequisites: **Chem 206, Math 202, Phys 201 or Phys 211.**

Offered: each spring term

404 Biochemistry

4 credits

A study of the principles of chemistry as applied to biochemical systems.

Prerequisite: **312** or permission of instructor

Offered: spring term

406 Thermodynamics and Kinetics II

4 credits

Tools of classical equilibrium thermodynamics are applied to non-ideal systems. Statistical mechanics is introduced as a means of understanding thermodynamics at the level of atoms and molecules. Diffusion, viscosity and chemical reactions as dynamic processes are examined in the context of the theory of irreversible processes.

Prerequisite: **401**

Offered: fall term of even-numbered years.

408 Structural Inorganic Chemistry

4 credits

A survey of the structure, reactivity and spectra of chemical compounds and a more sophisticated treatment of chemical periodicity. Bonding in solids; organometallic compounds, transition metal chemistry; acid-base reactivities; non-aqueous solvents; electrochemistry. Although rigorous theoretical chemistry is used as a basis wherever possible, this course is really a sort of travelogue through the intriguing, surprising, bizarre and amusing behavior of the 105 elements that are not carbon.

Prerequisite: **206**

Offered: fall term

411 St. Andrews Integrated Laboratory

2 credits

A series of experimental studies beginning with brief, well documented demonstrations and graduating through longer, more open-ended problems, to individual investigations of several weeks' duration that will involve the student in a nearly independent and research-like problem. During the course of these studies increasingly advanced instrumentation will be used and the student will become familiar with modern means of accessing the current research literature, and of preparing well-written research reports.

Prerequisite: 312 or permission of the instructor

Corequisite: Phys 201 or 211

NOT TO BE OFFERED AFTER FALL '87

437 Organic Reaction Mechanisms

4 credits

This course will focus on the conceptual and empirical techniques used in determining and understanding bond making and bond breaking in the transformations of organic molecules. The topic selection will include the following: reaction kinetics, linear-free energy relationships, solvent effects, isotope effects and simple molecular orbital theory.

Prerequisite: 312

Offered: fall term of even-numbered years

438 Natural Products: Structure and Synthesis

4 credits

Selected case studies will be used to explore technical and conceptual approaches to the synthesis and structure determination of complex organic molecules from natural sources. Illustrative examples will include selections from the chemistry of terpenes, steroids, alkaloids and other complex natural products.

Offered: fall term of odd-numbered years

Prerequisite: 312

190, 290, 390, 490 Special Studies in Chemistry

195, 295, 395, 495 Internships in Chemistry

199, 299, 399, 499 Guided Independent Study in Chemistry

Courses in Physics

201-202 College Physics I and II

4 credits each

Basic concepts in the classical fields of mechanics, sound, heat, electricity, magnetism and light plus a brief introduction to modern physics.

Prerequisites: an average background in high school mathematics will be needed.

Offered: fall and spring terms respectively of alternate academic years.

211 General Physics I

4 credits

The fundamental laws of mechanics, sound and heat presented at a level appropriate for students planning careers in science or engineering.

Prerequisite: **Math 201**

Offered: fall term

212 General Physics II

4 credits

The basic principles of electricity, magnetism and optics. Presented at a level appropriate for science and pre-engineering students.

Prerequisite: **211, Math 202**

Offered: spring term

305 Analytical Mechanics

4 credits

Development of new mathematical skills and deeper insight into classical mechanics are obtained through the study of the dynamics of particles and rigid bodies. Harmonic motion and motion in central force fields are among the topics considered.

Prerequisite: **212, Math 202**

306 Electromagnetic Fields

4 credits

Utilizing the methods of vector calculus, this course provides an intensive study of electric and magnetic fields. Maxwell's equations are discussed at some length and consideration is given to fields both in free space and within materials.

Prerequisite: **212, 305, Math 310.**

308 Modern Physics

4 credits

Special relativity and quantum physics are developed, using an historical approach. Examples of topics which may be covered are: the Lorentz transformation equations; energy and momentum in relativistic mechanics; the Compton effect; and the

Bohr atom. Some time near the end of the course may be devoted to the study of recent discoveries in such areas as particle physics or general relativity.

Prerequisite: **212**

405 Quantum Mechanics

4 credits

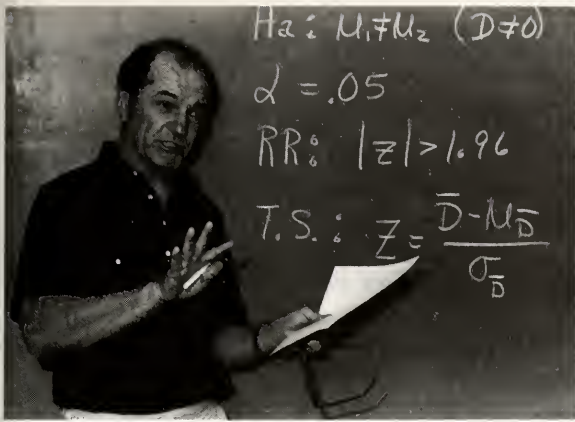
An introduction to fundamentals of quantum mechanics examining wave functions, wave equations, operators, representations and perturbation theory.

Prerequisite: **Math 310** and **Phys 308** or **Chem 400**

190, 290, 390, 490 Special Studies in Physics

195, 295, 395, 495 Internships in Physics

199, 299, 399, 499 Guided Independent Study in Physics



Mathematics and Computer Science

Professor Somerville (chairperson); Associate Professors Greene and Morgan; Assistant Professors Hauver, Khalil, Leonard (on leave), Shobe

Major in Mathematics

To obtain a major in mathematics the student must satisfactorily complete ten courses in mathematics and computer science (excluding **Math 208** and **Math 313**), five of which must be at the upper (300-400) level. These courses must include **CS 110**; **Math 201**, **202** and **471**; and one course in probability or statistics.

Students who plan to teach at the secondary level should take **Math 330**.

Math 313 is required for class A certification as a secondary teacher of mathematics in North Carolina schools.

Major in Mathematics with Concentration in Computer Science

A student may have the major designated as mathematics with concentration in computer science if, in fulfilling the major requirements, four courses in computer science at or above the content level of **CS 110** are satisfactorily completed.

Minor in Mathematics

A minor in mathematics consists of **Math 201** and **202**, three courses in mathematics at the upper level, and one additional course in mathematics or computer science.

Minor in Computer Science

The requirements for a minor in computer science are **CS 110**, **CS 253**, **301** and **302**; **Math 205** and one other course in computer science at the upper level.

Courses in Mathematics

110 The Language and Logic of Mathematics

3 credits

The course is designed to give the general liberal arts student (including math and science majors) insight into mathematics by focusing on the language structure and logic rather than specific content areas. Topics include sentential, deductive and quantificational logic, valid arguments, strategies of proof, mathematical and non-mathematical systems.

115 Precalculus

3 credits

A foundation course which serves as a prelude to calculus. This course stresses concepts, particularly functions and approximations and provides a glimpse of calculus. Intended for students with an average background in high school mathematics.

201 Calculus I

3 credits

The first course in differential and integral calculus. Emphasis is on derivatives and differentials, although an introduction to definite and indefinite integrals is included.

Prerequisite: **Math 110, 115** or permission of the instructor.

Offered each fall and spring term.

202 Calculus II

3 credits

A continuation of **Math 201**. Topics include techniques of integration, improper integrals, applications of integrals, exponential and logarithmic functions, introduction to sequences and series and Taylor's Theorem.

Prerequisite: **Math 201**

Offered each fall and spring term.

205 Statistics

3 credits

An introduction to elementary techniques of statistics. This course emphasizes the use of statistical inference in the study of population parameters and includes both estimation and hypothesis testing procedures.

No prerequisite

Offered each fall and spring term.

208 Structures of Algebra and Geometry

3 credits

A study of some basic algebraic and geometric systems. Students gain experience with abstractions, logical deductions and applications. This course is especially designed for elementary education majors and does not count toward a mathematics major.

310 Multivariable Calculus

4 credits

The algebra of n -space, functions of several variables and their derivatives, directional derivatives, chain rules, extrema problems, multiple integrals, an introduction to line integrals and Green's Theorem.

Prerequisite: **Math 202**.

313 The Teaching of Mathematics

4 credits

A study of principles and objectives of secondary mathematics, general and specific techniques, organization of content and enrichment material that includes history of mathematics. This course does not count toward a mathematics major.

Prerequisite: permission of the instructor.

321 Matrix Algebra

4 credits

An introduction to matrix theory and computation. Topics may include Gaussian elimination, triangular factorization, vector spaces, orthogonal subspaces, fundamental subspaces associated with a matrix, projections onto subspaces, determinants, eigenvalues, eigenvectors and diagonalization of a matrix.

Prerequisite: **Math 201**.

330 Geometry

4 credits

A re-examination of geometry from a modern axiomatic viewpoint. This course treats both Euclidean and non-Euclidean geometries.

Prerequisite: permission of the instructor.

340 Ordinary Differential Equations

4 credits

A study of methods for the solution of ordinary differential equations. Primary attention is given to the solution of linear equations and special nonlinear ones and to existence and uniqueness theory for the linear case.

Prerequisite: **Math 202**.

361, 362 Analysis I and II

4 credits

The real number system, countability, Euclidean spaces, the Bolzano-Weierstrass and Heine-Borel Theorems, metric spaces, completeness, continuity, differentiation, integration, sequences and series.

Prerequisite for **Math 362: Math 361.**

371 Discrete Mathematics

4 credits

A study of certain mathematical concepts and methods of a discrete nature which are important in computer science and other applications of mathematics. Topics may include induction, relations, permutations, combinatorics, graphs, trees, recurrence generating functions and algebraic systems.

Prerequisite: **Math 202** and **CS 110**, or permission of instructor.

372 Numerical Analysis

4 credits

An introduction to concepts, methods and algorithms of numerical analysis. Topics include round-off error, solution of equations in one variable, interpolation, numerical integration, initial value problems for ordinary differential equations and approximation of functions.

Prerequisite: **Math 202** and **CS 110**.

471 Algebraic Structures

4 credits

An introduction to groups, rings, integral domains, fields and graphs.

Prerequisite: **Math 321** or **371**.

Offered in alternate years.

Courses In Computer Science

110 Introduction to Computer Science

3 credits

A foundation course in computer programming. This course introduces the student to algorithm construction, data structures, computer design and operations, and applications to various areas of study. Requires no previous experience with computer programming.

253 Assembler Language

3 credits

A study of assembler languages, with particular emphasis on assembler for the PDP-11. Topics include machine languages, internal representation, algorithm develop-

ment and efficiency of algorithms.

Prerequisite: CS 110 or its equivalent.

301 Data Structures

4 credits

A study of the basic concepts of data organization. Emphasis is on techniques for storing and processing information.

Prerequisite: CS 253

302 Operating Systems

4 credits

A study of the operation of large computer systems. The course includes the study of real-time, time-sharing, and large multi-programming computer systems.

Prerequisite: CS 253 and 301

Offered on alternate years.

351 Computer Architecture

4 credits

A study of the organization and interconnection of the components of computer systems. Topics include theory of design, Boolean algebra and gates, Karnaugh maps, flip flops, number representations and operations, memory, memory addressing and storage.

Prerequisite: CS 253

Health, Physical Education and Recreation

Associate Professors Crabbe (on leave 1987-88) and Williams; Assistant Professors Scoles (Chairperson), Maurer, Simons and French

The physical education program includes the major, the required program, intramural athletics, intercollegiate athletics and informal recreational activities.

Major in Physical Education

The major offers several career options: teaching, adapted physical education and coaching. A HPER program fact sheet and career opportunities sheet are available at the physical education center office. Requirements for a major include the following courses:

Required activity courses:

P.E. 280: Aquatics/Outdoor Recreation Activities

P.E. 282: Individual Sports

P.E. 283: Team Sports

Required theory courses:

BIOL 207: Human Anatomy and Physiology

HPER 210: Personal and Community Health

HPER 211: Introduction, History and Principles of PEHER

HPER 214: First Aid and CPR

HPER 314: Kinesiology

HPER 402: Physiology of Exercise

HPER 410: Organization and Administration of HPER

Two elective HPER theory courses at the 300-400 level

Contract majors can be developed to suit the interests of individual students. A contract would include certain core courses to be worked out with the student's advisor.



The minimum number of courses in a contract would be twelve with at least five courses at the 300-400 level.

Students interested in teacher certification must include in their programs specified teacher education courses including an internship. Students with other academic majors may select appropriate physical education courses to prepare them for coaching interschool sports.

Minor in Health, Physical Education and Recreation

Minors are possible with an emphasis in the following areas:

1. Elementary Physical Education
2. Secondary Physical Education
3. Health Education
4. Recreation
5. Adapted Physical Education (cross-listed as Resource Teacher with Physically Impaired)
6. Athletic Coaching
7. Equine Studies

Required Physical Education

Two terms of physical education activity courses are required of all degree candidates. One course is in the health and physical fitness area; one course in a 200 level activity course. Course options are listed below. A maximum of ten physical education activity credits may be counted toward graduation.

The 100 level course meets three hours per week with one hour per week being devoted to discussion of concepts of physical fitness and to other classroom activities. **HPER 210: Personal and Community Health** is an alternative option which may be used in fulfilling this part of the breadth requirement.

The 200 level courses will meet two hours per week for instruction and group participation in the activity. In addition, each student must spend one hour per week in activity on an individual basis.

All students must complete the one 100-level course during the freshman year and one 200-level course by the end of the sophomore year. All students (including varsity athletes) will be required to complete the four physical education credits (two courses) for graduation. Participation in intercollegiate athletics (**P.E. 265**) will not satisfy the 200 level activity requirement, but it may be counted toward the ten maximum credits. **P.E. 265** will be grade1 P/F. Those students wishing to receive credit for intercollegiate athletics (**P.E. 265**) are responsible for course registration during the proper registration time period.

Students desiring physical education activity credit for activities not scheduled should register for the appropriate special studies course during the registration period.

Courses in Health, Physical Education and Recreation

P.E. 100 Concepts of Physical Education

2 credits each

Required fitness of all freshmen during their first year at St. Andrews.

200 level courses: *2 credits each*

P.E. 200	Adapted Physical Education
P.E. 210	Swimming
P.E. 211	Tennis
P.E. 212	Golf
P.E. 213	Soccer
P.E. 215	Volleyball
P.E. 216	Slimnastics
P.E. 220	Recreational Games (bowling, billiards, table tennis)
P.E. 225	Racquetball
P.E. 226	Gymnastics and Tumbling
P.E. 230	Handball
P.E. 235	Bowling
P.E. 240	Advanced Bowling
P.E. 245	Advanced Tennis
P.E. 246	Advanced Weight Training
P.E. 255	Life Saving
P.E. 261	Position Class
P.E. 262	Position and Control I
P.E. 263	Position and Control with Introduction to Jumping
P.E. 264	Jumping Fundamentals
P.E. 265	Intercollegiate Sports
P.E. 266	Riding Courses
P.E. 267	Showing Hunters
P.E. 268	Introduction to Schooling Horses
P.E. 273	Aquatics
**P.E. 274	Open Water Scuba Course
**P.E. 275	Advanced Open Water Diver
**P.E. 276	Rescue Diver
**P.E. 277	Dive Master
P.E. 280	Aquatics/Outdoor Recreation Activities
P.E. 281	Dance/Gymnastics
*P.E. 282	Individual Sports
*P.E. 283	Team Sports
P.E. 290	Special offerings in physical education activities

*Courses required for physical education majors. The courses are open to all students with priority to HPER majors and minors.

**The above listed SCUBA courses must be taken in sequence. An additional fee is required for rental of equipment.

Theory Courses

(listed as HPER courses)

210 Personal and Community Health

3 credits

A study of health information and basic attitudes toward health practices fundamental to wholesome living for the college student. Recommended for all students.

211 Introduction, History and Principles of Physical Education, Health Education and Recreation

3 credits

An orientation to the field of physical education, health education and recreation. Basic principles of modern physical education and historical background, stressing aims and objectives.

212 Recreation and Intramurals

3 credits

Planning and management of school and community recreation and intramural programs. The course will cover the organization and conduct of intramural programs for elementary, secondary and college level students. Principles in organizing and administering recreation programs and introduction to professional areas of recreation will be included. Field experiences in a variety of settings will be included.

214 Sports Medicine and Emergency Care

3 credits

Basic instruction in first aid methods for the home, school and community. There will be further study of the prevention, care and reconditioning of athletic injuries.

215 Principles of Adapted Physical Education

3 credits

An introduction into physical education for the exceptional student. Special emphasis will be placed upon understanding of physical and mental limitations and adapting the physical education program to these limitations. Two hours per week will be spent working with a handicapped student.

217 Lifetime Wellness

The purpose of the course is to introduce students to the rationale for a physically active lifestyle and a responsible approach to diet. Students will be required to

perform physically in aerobic activity for an entire term, and as well, will be required to evaluate their own dietary needs. The course is to be presented in four lessons each week: one-hour lecture and three hours of exercise.

240 Stable Management and Horse Husbandry

3 credits

A review and practice of basic horse care tasks and a discussion of farm and stable management practices. The course aims at preparing the student to be able to care for horses properly and to be capable of managing a small stable successfully.

241 Horse Science

3 credits

To study the horse's functional anatomy, common ailments and parasites with a special emphasis placed on the skeletal, muscular and digestive systems, conformation and movement.

271 Motor Control

3 credits

Motor control and learning explains how skilled performers in industry, sports, music or dance can make their actions seem so simple and graceful—while beginners at the same tasks are clumsy and awkward. The course will be presented in three phases: an introduction and history of the field; a discussion of human skilled performance and motor control, and an analysis of motor learning. The emphasis of the class is on movement behavior and those factors that affect quality of performance. Current research will be reviewed as part of the course work.

311 Evaluation in Physical Education

4 credits

A course designed to inform the student in construction and effective use of written and skills tests. Emphasis on how to compare and use the results of the test. Taught in alternate years.

312 Team Sports: Skills and Techniques

4 credits

A detailed study of methods, materials and techniques of teaching team sports. Emphasis on basketball, soccer and baseball. Taught in alternate years.

313 Teaching Physical Education in the Secondary Schools

4 credits

Development of courses of study, instructional units and lesson plans for secondary schools. Observations and abbreviated teaching experiences in junior and senior high schools. To be taken in conjunction with **Education 420-421 Student Internship**.

314 Kinesiology

4 credits

This course offers an analysis of movement to provide the means to understand and apply kinesiological principles of all phases of physical activity. Emphasis includes basic anatomy and motor behavior, analysis of movement, application kinesiology to skills and psycho-social influence on how an individual learns and improves his performance. Taught in alternate years.

316 Individual and Dual Sports: Skills and Techniques

4 credits

A detailed study of methods, materials and techniques used in the teaching of individual and dual sports. Emphasis on track and field, tennis and golf. Taught in alternate years.

317 School Health Education

4 credits

Teaching and learning experiences and activities in the school health program. Organization, administration and implementation of the school health program will be covered. Field experiences will be included in the course at selected grade levels.

340 Equine Business Management

3 credits

To develop an understanding of business practice directly related to starting and running an equine establishment. This course includes material in accounting, marketing and management.

341 Preparation for ANRC Rated Rider Testing

3 credits

To prepare the student to take the ANRC Rated Rider Exam for his/her level of riding.

342 Form to Function: Principles of Judging and Selecting Hunters

4 credits

This course will provide the student with an understanding of equine conformation, the mechanics of the gaits, and possible unsoundnesses. It will also teach the student a system for judging horses on the line and in performance so that they will be able to select a horse suitable to a particular function and begin to be competent in judging conformation and performance classes.

401 Recreation Activities and Therapeutic Exercise for the Exceptional Student

4 credits

A practical approach to the organization and administration of recreational activities and therapeutic exercise programs for the exceptional student. Prerequisite: **HPER 215** or permission of instructor. Two hours per week will be spent working with a handicapped student.

402 Physiology of Exercise

4 credits

Physiology of exercise is concerned with human functions under the stress of muscular activity; thus it provides a basis for the study of physical fitness and athletic training. The course is organized into three parts: (1) selectively reviews of the most pertinent areas of basic physiology; (2) relates this knowledge directly to practice in physical education and (3) relates the principles of physiology directly to the current problems in physical education and athletics. Taught in alternate years.

404 Adjustment of the Physically Impaired

4 credits

A study of the various types of physical handicaps with consideration of the physical, emotional, sociological and psychological problems. Emphasis is on the physical and multi-handicapped children in public, private and special schools. Field experiences are included.

405 Recreation for Special Individuals

4 credits

Organization, development, and adaptation of recreational skills and activities for special individuals. Practical experiences will include programming, planning, and conducting activities for mentally retarded individuals, physically impaired individuals, and senior citizens. Presentations, discussions, observations, and readings are arranged to give students an understanding of how recreation serves in meeting some of the physical, social, emotional, and psychological needs of special individuals.

406 School and Community Health Programs/Services

4 credits

Resources, agencies, and relationships in planning and administering school and community health education programs. Students will study and become involved with the various components of school health services. Field experiences will be included in the course.

410 Organization and Administration of HPER

4 credits

A course dealing with the policies and problems of organization and administration of health and physical education and athletic programs in schools. It includes program construction in physical education, plant facilities, scheduling load, instruction evaluation, and financing of the program. Each student will do extensive study in an area of special interest.

440 Introduction to Contemporary Riding and Teaching

4 credits

This course develops a working knowledge of the principles, techniques, and theory of modern riding through the intermediate levels. This course will prepare a qualified student to take a National Riding Commission Rated Rider Examination.

190, 290, 390, 490 Special Studies In Physical Education

195, 295, 395, 495 Internships In Physical Education

199, 299, 399, 499 Guided Independent Study in Physical Education

W41 Teaching Health Education and Physical Education in the Elementary Schools, grades 4-9. Winter Term

3 credits

Principles, practices, and procedures in health education and physical education activities for the elementary school including organizing and conducting such a program. Methods and materials in group games of low organization. Required of all elementary education majors, 4-9. Taught in alternate years.

W42 Teaching Health Education and Physical Education in the Elementary Schools, grades K-3. Winter Term.

3 credits

This course deals with the techniques of helping children to discover their own solutions to carefully stated problems. Emphasis on helping children understand their own bodies and their movement capabilities. Required of all elementary education majors. K-3. Taught in alternate years.

HPER Honors Program

Qualified students are encouraged to participate in the HPER honors program. Information and criteria about the program are available from the physical

The Varsity Program

The athletic program at St. Andrews is approved by and has full membership in the National Collegiate Athletic Association (NCAA), Division III. St. Andrews is a charter member of the Dixie Intercollegiate Athletic Conference (DIAC), in both men's and women's athletics. Effective with the 1988-89 academic year, St. Andrews will be affiliated with District 26 of the National Association of Intercollegiate Athletics (NAIA) in both men's and women's athletics and will no longer be a member of the DIAC.

The men's intercollegiate sports program includes:

Fall — cross country, soccer

Winter — basketball

Spring — tennis, golf, track, baseball

The women's intercollegiate sports program includes:

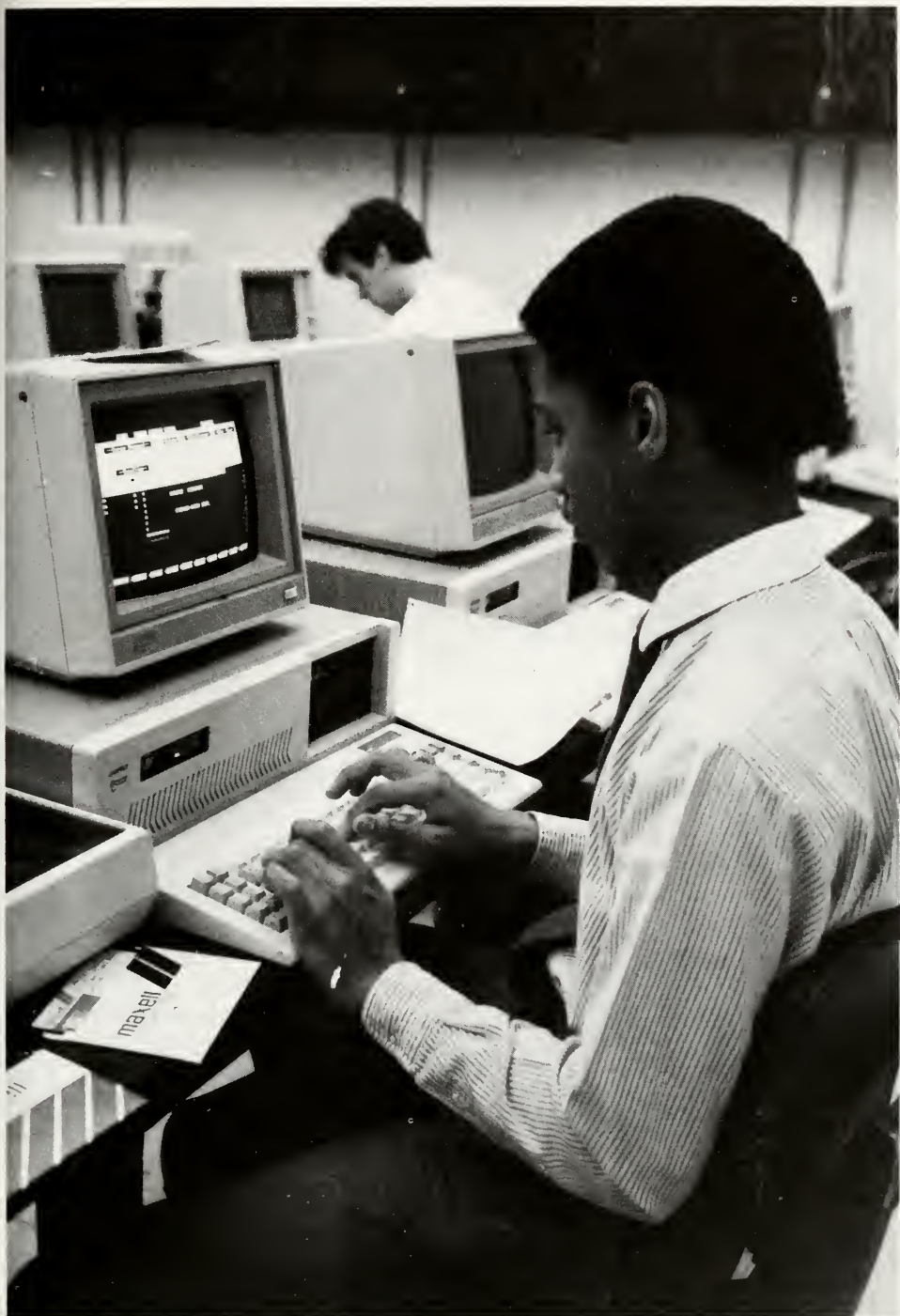
Fall — volleyball

Winter — basketball

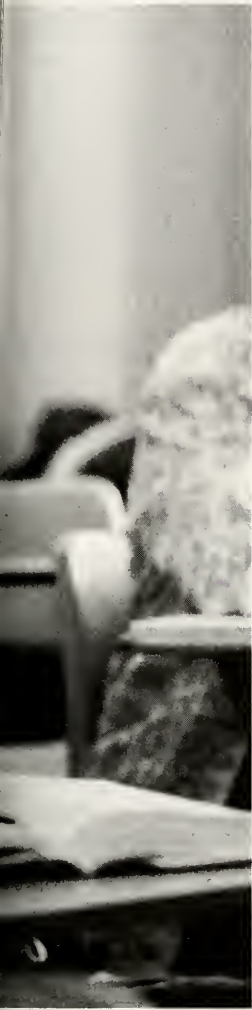
Spring — tennis, softball

Equestrian competition is an intercollegiate sport for both men and women.

Adapted sports programs are available in wheelchair sports and cerebral palsy sports organizations.







Social and Behavioral Sciences

Chairperson: Robert J. Hopkins

Departments

Anthropology
Business Administration and Economics
Education
History
Politics
Psychology

Majors

Business Administration and Economics
Education
History
Politics
Psychology

Pre-Law Concentration

St. Andrews offers a pre-law concentration for students interested in legal careers. Pre-law students may

major in nearly any discipline. A pre-law advisor in the division of social and behavioral sciences assists students in planning programs of study.

Internships

The programs in the division offer internships to serve the career needs of St. Andrews students.

56

Anthropology



Although no major currently is available in anthropology, students may enroll in anthropology courses for a variety of reasons including general interest, to meet their breadth course requirements and for a contract or thematic major. A thematic major is an individualized

contract made in conjunction with the faculty in anthropology and another major which lists a combination of courses consistent with a theme which fits the student's own goals and objectives. Relevant themes include an interdisciplinary mixture of courses from biology, politics, education, history, business administration and religion.

Courses in Anthropology

ANTH 208 Introduction to Physical Anthropology

3 credits

The study of human evolution and the variation in modern humans including the fossil record, evolutionary processes, the development and dispersal of humankind.

ANTH 209 Introduction to Cultural and Social Anthropology

3 credits

This course introduces beginning students to social and cultural anthropology and to some of its major concepts, methods and findings. Included are anthropological perspectives on the human experience, anthropological approaches to research and analysis of human groups including economics, technology, politics, ideology, art, language and their interrelationships.

ANTH 306 Ethnology

4 credits

This course begins with a brief survey of topics and approaches of cultural anthropologists, their questions, their methods and cross-cultural comparisons. It focuses on culture, traditions and the pervasive processes of change which are applicable to the study of all societies including environment and ecology, the regulation of membership, symbolic messages and rituals, cultural transmission and control of behavior. The course focuses on questions rather than answers, for students should find things out for themselves in an active way rather than passively through absorbing abstract knowledge. The latter part of the course involves students in identifying and researching a topic of interest in the St. Andrews or Laurinburg communities.

ANTH 309 Contemporary Social Problems

4 credits

A study of the explanations for social change and of the ways divergent values create social problems in complex societies. The major areas of tension within which contemporary problems arise are considered such as the problems of cities, population and environmental problems, wealth and power in the corporate state, the family, health care, aging race and ethnic relations. This course is for students in the social sciences who desire a practical emphasis to their disciplinary training.

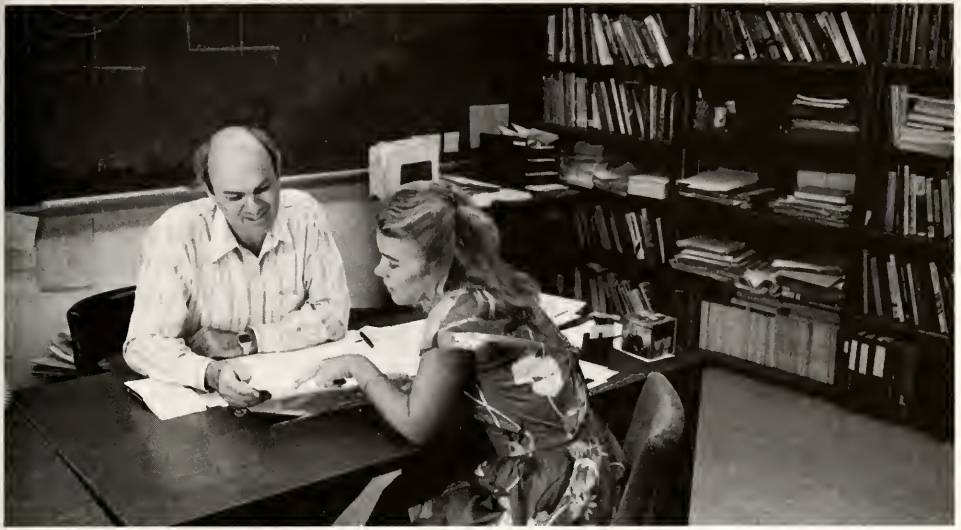
ANTH 421 Anthropological Theory

4 credits

An upper division course which examines theories about the nature of human societies, culture and people, attitudes toward conflict (harmony or tragedy) and knowledge and action. A variety of viewpoints from anthropologists and sociologists are studied.

190, 290, 390, 490 Special Studies in Anthropology

199, 299, 399, 499 Guided Independent Study in Anthropology



Business and Economics

Professor Tom Till; Associate Professors Robert Hopkins (Chair), Jack Roper (on leave 1987-88); Assistant Professors William Prosser, Jack Ferren.

Major in Business and Economics

The integrated business and economics program, in keeping with the liberal arts tradition of general education at St. Andrews, blends a mastery of skills, an exposure to knowledge and the development of values. This integration strengthens the studies in the business curriculum by drawing on the natural affinity which exists between the world of business and the study of economics. By the use of the track system (areas of concentration), the integrated program allows students interested in economics to prepare for careers in business or government or will prepare them for graduate study. For students whose primary interest is business, the track systems allows professional training within the context of a liberal arts education as well as preparation for graduate study. The program is designed to help the student achieve four goals: 1) understanding of the activities of the firm as a whole; 2) understanding the economic environment of the firm; 3) exposure to the most important tools of the professional manager; 4) learning to become a better autodidact, able to understand constantly changing concepts.

Requirements for a Major in Business and Economics

Fifteen courses are required for a major in business and economics (B/E). Seven of the courses must be at the 300/400 level. In addition, it is highly recommended that the student in consultation with his/her advisor identify a series of courses in a related discipline or disciplines to complement the B/E major.

All majors are required to take **Microeconomics, Macroeconomics, Principles of Accounting I, Principles of Accounting II, Principles of Management, Principles of Marketing, Principles of Finance, Statistics or Calculus, and Senior Policy and Strategy Seminar.**

The business and economics major must choose an area of concentration. The areas of concentration are management, marketing, economics, finance and accounting. Three courses must be completed in specific areas to meet the requirements for a concentration. Close consultation with the advisor will be important in the final selection of an area of concentration. Students who plan to major in business and economics should complete **Principles of Accounting I and II, Microeconomics and Macroeconomics** by the end of their sophomore year.

Contract Majors in Business Administration and Economics:

For the student whose needs are different from the standard tracks in B/E, contract majors in "International Business" or in "General Business" may be arranged. Additionally, interdisciplinary contract majors may be arranged. Examples of interdisciplinary contract majors include: business and computer science; B/E and political science; hospital administration; theatre management; business and psychology; business and languages. A B/E contract major should have a minimum of fourteen courses. Of this total a minimum of ten courses must be in business and economics. At least six of the contracted courses should be at the 300-400 level. All contracts must be approved by the program faculty.

Many students from other majors take business and economics courses as electives. Such students are encouraged to consult with the program faculty to determine which courses are most appropriate to their goals. Applications for declaration of a business and economics major and contract majors are reviewed by the entire program faculty.

Master's Degree in Accountancy (MACC): St. Andrews Presbyterian College/University of Georgia-Dual Degree Program.

The Dual Degree Program in Accounting between St. Andrews Presbyterian College and the University of Georgia establishes a plan whereby an undergraduate student will attend St. Andrews Presbyterian College approximately three (3) academic years and the J.M. Tull School of Accounting of the University of Georgia for approximately two (2) academic years. After completing the academic requirements of St. Andrews Presbyterian College, the student shall be awarded a bachelor's degree in business administration from S. A. P. C. After completing academic requirements of the University of Georgia the student shall be awarded a master's degree in accountancy from U. Ga.

Courses which are recommended to be part of the study program at St. Andrews Presbyterian College: (The student pursuing the dual degree program will be exempted from B/E 422.)

B/E 209	Principles of Accounting I
B/E 210	Principles of Accounting II
B/E 231	Microeconomics
B/E 232	Macroeconomics
Math 205	Statistics
C.S. 110	Intro. to Computer Science
B/E 325	Principles of Management
B/E 304	Principles of finance
B/E	300/400 level microeconomics elective
Math 201	Calculus
B/E 312	Principles of Marketing
B/E 309	Intermediate Accounting I
B/E 310	Intermediate Accounting II

Requirements for approval for degree-seeking status as a dual degree candidate at the University of Georgia are as follows.

In order for a student to become a dual degree candidate at U.Ga. he or she must have:

1. Completed 27 courses (approximately 102 semester hours) at St. Andrews Presbyterian College.
2. A recommendation from the pre-professional accounting program advisor at St. Andrews Presbyterian College.
3. A college grade point average of at least a 3.0 and GMAT test results which would indicate that he or she could satisfactorily complete the degree requirements at the University of Georgia.

Courses in Business Administration and Economics

120 Introduction to Business and Economics

3 credits

An introduction to basic concepts in business and economics, including microeconomics, macroeconomics, management, marketing, accounting and finance, and risk management and insurance.

209 Principles of Accounting I

3 credits

An introduction to accounting. The study of the basic accounting equation transaction analysis and financial statements. Emphasis is on understanding basic concepts and the logic of accounting principles and their application to specific accounting problems.

210 Principles of Accounting II

3 credits

An introductory study of internal accounting with emphasis on interpretation and application of accounting data. The course stresses the "attention-directing" and problem-solving function of accounting in relation to planning and control, evaluation of performance, analysis and decision-making. Prerequisite: **B/E 209**

231 Microeconomics

3 credits

A survey of microeconomics theory. The theory of the pricing and allocation of resources will be applied to current issues.

232 Macroeconomics

3 credits

A survey of macroeconomic theory including discussions of unemployment, inflation and other current issues. It is recommended that **231** be taken before **232**.

302 Economic Philosophy: The Development of Economic Thought

4 credits

A survey of the development of economic analysis from Mercantilism to the post Keynesian era. Emphasis will be placed on Smith, Ricardo and the British Classical School: Jevons, Marshall and the development of Marginalism; Austrian Capital Theory and the Neoclassical theory of money, interest and prices.

304 Principles of Finance

4 credits

A consideration of both internal and external facets of management of corporate finances. Risk, cost of capital and capital markets are explored along with governmental controls over such financing. Prerequisite: **B/E 209** and **Math 205** or permission of instructor.

306 Money, Banking and Financial Institutions

4 credits

A study of monetary policy and the banking system. Includes the basics of macroeconomic theory; the theory of economic policy in general, the mechanism of monetary policy in particular, advantages and disadvantages of monetary policy in comparison with fiscal policy. Financial institutions and instruments and asset portfolio management will be introduced. This will form a basis for the examination of the regulation of banking and promote monetary policy and financial stability and efficiency. Prerequisite: **B/E 232** or permission of instructor.

308 International Trade and International Finance

4 credits

A study of international trade, including the gains from trade, the use of tariffs and quotas, the international monetary system and the problems associated with exchange rates and balance of payments difficulties. Prerequisite: B/E 231 or 232 and B/E 304.

312 Principles of Marketing

4 credits

A functional analysis of marketing and its importance as an economic activity. Current and potential institutions through which marketing is carried on are studied. Additional managerial orientation is provided through case studies and decision-making practice. Prerequisite: 231 or permission of instructor.

315 Business Law

4 credits

A “nuts and bolts” study of the principles of law which create, define and regulate the rights and liabilities of persons taking part in business transactions. Areas covered include contracts, and other agency, commercial paper, sales and bankruptcy.

319 Intermediate Microeconomics: Theory and Applications

4 credits

A study of the theory of the firm, its behavior, behavior of consumers, and management decision making. Specifically the course will focus on price and output decisions, rational economic choices of consumers, economics of technological change, production efficiency and costs, competitive behavior, and adjustments of markets to new conditions. Prerequisite: B/E 231 or permission of instructor.

325 Principles of Management

4 credits

An introduction to the basic theories and practices within the management profession. Areas stressed are human relations, organization and their structure, delegation to authority.

333 Advertising and Promotional Strategy

4 credits

An examination of the strategic application of two of the most important activities to marketing managers in the communication of product information to clients and consumers. Marketing campaigns, media selection, use of trade shows, product research and effectiveness determination will be studied in concentrated team efforts. Prerequisite: B/E 312.

355 Organizational Behavior

(See Psychology 235/335)

362 Investments and Portfolio Analysis

4 credits

A study of stocks, bonds and other investments, as well as security markets in general. Capital market theory is used to analyze portfolio management and investment strategy. The course examines the art as well as the science of investing. Prerequisites: B/E 304 or consent of instructor.

363 Intermediate Macroeconomics: Theory, Business Cycles, Forecasting

4 credits

A study of the empirical patterns of the business cycle and long-run growth, the macro theory to analyze them, and methods of forecasting at the economy, industry and company levels. Prerequisite: B/E 232 or permission of instructor.

364 Quantitative Methods for Business and Economics

4 credits

This course will introduce the student to many of the more important mathematical approaches and specialized techniques which can be used in the analysis of basic business problems requiring quantitative decisions. The aim is to develop an understanding of problem-solving methods based upon a careful discussion of problem formulation, mathematical analysis and solution procedure, utilizing numerous examples.

366 Economic Development and International Business

4 credits

Analysis of the forces inhibiting economic growth in underdeveloped countries. Includes discussions of growth models, theories of growth, development planning, economics of foreign aid and the role of technological progress. Prerequisites: 231 and 232.

371 Cost Accounting

4 credits

The application of cost analysis to manufacturing and distribution problems. The recording of manufacturing costs for the assembly and continuous process types of industry. Analysis of the behavior characteristics of business costs, and a study of principles involved in standard costs systems. Prerequisite: B/E 210.

372 Auditing

4 credits

Professional and practical auditing theory. Review of internal control, audit procedures and development of audit programs for various types of business within the

framework of auditor's professional and ethical standards. Prerequisites: B/E 309 and Math 205.

373 Human Resources Management

4 credits

This course will focus on human resources, employment procedures and personnel administration. Topics to be covered include: analysis of personnel programs and policies; communications and practices in relationship to the effect upon productivity, organizational effectiveness and the satisfaction of personal objectives; and the recruiting, interviewing, developing and maintaining of an effective and satisfied work force. Prerequisite: B/E 325 or permission of instructor.

374 Entrepreneurship

4 credits

A study of the methods used to determine the feasibility of successfully establishing a business in a specific industry or market. Financial, marketing, organizational, competitive, governmental and demand factors will be analyzed. Each student will develop a business plan and a feasibility study for a new venture. Prerequisite: B/E 321 or permission of instructor.

376 Sales Management

4 credits

This course will stress the fundamentals of selling practices and examine the major issues encountered by a sales manager in a complex business environment. Areas of focus include interviewing, hiring, training, motivation and performance measurement of sales personnel. Case studies, role playing and team actions will be stressed. Prerequisite: B/E 325.

441 Issues in Advanced Management

4 credits

A study of areas of concern to managers in the work force today. Students will become involved with problem solving, organization theory, labor market trends and social responsibility. Case studies and contact with managers comprise a major part of the course. Prerequisite: 225 or 325 or 331 or permission of instructor.

442 Senior Policy and Strategy Seminar

4 credits

The combination and integration of business and economic principles in sophisticated analysis applied to case histories of a variety of firms and institutions. Includes a study of the formulation of organizational strategy. Emphasis will be on problem solving, analysis and decision making. Requires senior standing. Prerequisites: 231, 232, 209, 210, 304, 312 and 325.

446 Marketing Management

4 credits

Application of marketing principles and scientific analysis to solving complex marketing problems. Managerial areas include product management, pricing strategies, promotion and distribution management. Prerequisite: 312 or permission of instructor.

461 Issues in Advanced Finance

4 credits

A study of topics of concern to financial managers, such as mergers and acquisitions, small business finance and special problems in banking and investments.

471 Production and Operations Management

The management process applied to the design and operation of a production system, with production viewed as a function of the business rather than strictly a manufacturing activity. Topics include the planning, organizing and controlling functions of management; forecasting, facility location and layout; job design and scheduling; quality control and inventory control. Prerequisite: B/E 325.

190, 290, 390, 490 Special Studies in Business Administration and Economics

195, 295, 395, 495 Internship in Business Administration and Economics

198, 298, 398, 498 Research and Teaching Practicum in Business Administration and Economics

199, 299, 399, 499 Guided Independent Study in Business Administration and Economics

Education

Associate Professor:

Aidan O. Dunleavy

(Chairperson)

Clyde Edgerton, O.

Eugene Smith

Assistant Professor:

Barbara Steele

The education

programs described herein are approved under the standards and guidelines of the N. C. State Department of Public Instruction, Department of Education. Among its programs, the department of education at St. Andrews College offers regular teacher certification as follows: early childhood (K-4); intermediate (4-6); middle grades (6-9); secondary (9-12). Middle grades



emphases are offered in communication skills and literature, social studies, mathematics, natural sciences and health. Secondary certification is offered with content majors in biology, chemistry, English, French, history, mathematics, social studies and Spanish. Physical education is K-12 program.

Supplemental Emphasis Program:

In addition to regular certification programs, a supplemental emphasis program is offered for teachers of the gifted and talented. Details of the requirements for this program are available from the office of the department of education..

General Requirements:

All students in teacher education certification programs are expected to meet the following requirements:

- Successful completion of six credits of department approved education courses prior to admission to the program.

- Successful completion of a minimum of six department approved education courses prior to admission to the senior year teaching internship. These courses will, in general, include **EDUC 202 or 246; PSYC 303; EDUC 320, 321 or 341; EDUC 331, 333 or 335**. Students are eligible for admission to the internship, presently offered during the fall term, upon successful completion of at least 24 course credits in the major field, and given a SACU or 2.75.
- To have successfully completed the St. Andrews graduation requirements: (a) the student must have obtained a SACU of 3.0 in the appropriate major, (b) must have obtained a grade of C or better (2.0 on a 4.0 scale) in all required education courses, (c) must have satisfactorily demonstrated competence in pre-professional field experiences such as the teaching internship, and (d) must have attained passing scores on the North Carolina State Department of Public Instruction's required National Teacher Examinations (NTE's).

The St. Andrews faculty recognizes that some students may bring previous worthy educational experiences and preparation to St. Andrews, or acquire them on other than a 'standard academic basis.' The St. Andrews faculty believes that such experiences, where credible and where validatable, should be recognized in lieu of generally expected teacher certification course requirements. Other students, not primarily concerned with teacher certification, may wish to incorporate selected education courses into a college approved "contract" or "thematic" major. The department of education welcomes the opportunity to discuss the program flexibility options available to appropriate student interests and objectives. Questions concerning program flexibility options should be directed to the chairperson of the department of education.

Example Programs

Following are "example" teacher certification programs. Each student's individual program of study must meet state guidelines for certification, and must be approved by the chairman of the department of education. The process of obtaining such approvals will be explained to the student upon his/her application to the program, and a written description of requirements will be provided to the student upon his/her acceptance to the program.

1. Early Childhood (K-4)

Intermediate (4-6)

The state guidelines for these certification areas are similar. The curriculum differentiation should come in a focus on the developmental aspects of the pupil and his/her studies. The student teaching assignment level (grade) should determine the certification recommendation. A teacher education student wanting both certification recommendations would be expected to enroll in one additional course and one practicum experience in the second certification level.

2. Major Program: K-4; 4-6

Anthropology 209: Cultural Anthropology	(3)
Chemistry/physics, course approved by the department	(4)
Cultural arts: (3 courses)	
Art 321/Music 353/Theatre 103 or 203	(11)

Health Education 317: School Health and Safety	(4)
History 201/202: American Civilization I & II	(6)
Math 110 and 208: 110-Language and Logic of Math: 208-Structures of Algebra and Geometry	(6)
Physical Education in the Elementary School: K-6	(3)
Politics 201: Introduction to American Government	(3)
Education 209: Introduction to Early Childhood/ Elementary Education	(3)
Education 319: Children's Literature	(4)
Education 320: Communications Skills for the Elementary School	(4)

51 credits

3. Middle Grades (6-9)

The state guidelines for this area are new and distinctive. The focus is on both the development needs of the young adolescent as well as strong academic concentrations in two of the primary (preferred) subject areas of the school curriculum. The concentrations at St. Andrews would require five courses in each of the two areas.

4. Major Program: 6-9

Anthropology 209: Cultural Anthropology	(3)
Chemistry/physics course approved by the department	(4)
Education 210: Introduction to the Middle School	(3)
Language 251: Introduction to Linguistics	(3)
Math 110: Language and Logic of Math	(3)

16 Credits

Concentration Areas: (five courses in each area)

A. Communication Skills and Literature (17 credits)

Education 319
English 303
Two Literature Courses
Theater 103 or 203

B. Social Studies: (16 credits)

History 201, 202
Politics 201
North Carolina History
B/E 120
Upper level History or Politics course

C. Math: (17 credits)

Math 208, 115, 321, 330 or approved elective

Computer Science 100 or 110 or another elective

D. Natural Sciences and Health (20 credits)

Biology 207, 211 or 307 (any two)

Chemistry 201, 206 or 311 (any two)

Health Education 317

5. Secondary (9-12)

The state guidelines for this area of certification focus upon preparation in a major field of study other than education, e.g. biology and professional preparation in teaching. A student seeking secondary certification must meet the requirements of his/her content major and must also successfully complete a course of study to, include for example, EDUC 202, PSYC 303, EDUC 315, EDUC 321, EDUC 335, EDUC 420 and EDUC 421.

Important Notice: New Education Programs effective Fall 1987

Beginning in the fall of 1987 new certification and non-certification programs of study in education are being offered. Much of the detail of these programs was not available for printing in the present catalog. However, new program information and requirements are readily available through the department of education office, and information supplemental to the present catalog will be available through the office of the registrar in time for spring 1988 enrollment. Students entering in the fall of 1987 and beyond, or any presently enrolled student wishing new program information, should contact the chair of the department of education for program information and guidelines.

On May 13, 1984, the St. Andrews faculty approved the following statement of commitment and support of the teacher education program: "The Educational policy committee believes that St. Andrews College, as part of its overall mission as a liberal arts college and its commitments as an institution of higher learning within its region and locality, should maintain a quality education program whose primary mission is the education of well-qualified teachers" In a further demonstration of this commitment and support of the pursuit of excellence in Teacher Education at St. Andrews, the Faculty, at its meeting of April 27, 1987, approved the "concept and structure" of the referenced new programs in education. The programs offer a truly innovative, exciting, but demanding range of professional preparation alternatives; both certification and non-certification. It is our intent that St. Andrews always remain at the forefront of excellence and innovation in teacher education, and we welcome students with like, serious commitments. The college maintains active student recruitment and job placement organizations to better serve the teaching profession, and those students who wish to pursue careers in teaching.

Courses in Education

202 The American School: Foundation and Issues

3 credits

A presentation of the historical, philosophical and sociological foundation of the American school together with consideration of the current trends and issues with which the future teacher should be confronted. Observations and/or projects in the public school may be included in the course.

209 Introduction to Early Childhood/Elementary Education (K-4/4-6)

3 credits

An introductory study of the organization, administration, standards, program and parent-teacher relationship of pre-school, early childhood and intermediate programs through grade six. Attention is given to the organization, and the scope and sequence of the curriculum of state approved programs, both public and private. A variety of field experiences are incorporated within the course.

210 Introduction to Middle School Education (6-9)

3 credits

An introductory study of the organization, administration, standards, programs and parent-teacher relationships of the middle school program, grades 6-9. Attention is given the organization, and scope and sequence of the curriculum of state-approved program both public and private. A variety of field experiences are incorporated within the course.

246 Education, Culture and Society

3 credits

The goal of this course is to expose the student to, and interest the student in, education in America and other cultures. The course is an exploration of public and private education in historical, philosophical, sociological and culturally comparative perspective. Through a study of education in several cultures, the student is brought to an understanding of how educational systems develop and change over time, and how various facets of culture and society affect, and are affected by, educational practice. The course provides the student a basis for a critical review of public education in America.

251 Student Behavior and Education Organizations

3 credits

This course helps students understand how school organization influences teacher and student behavior, thus shaping student learning and the nature of teaching. Students will review contemporary organizational theory and its relation to school organization and to what is known about learning and cognition. Specific teacher and student behaviors in school settings will be studied so as to demonstrate the primary

assumption of this course — that schools teach. This course is intended to enable teachers to begin to understand power and influence in any organization, especially a school, and how power and influence in schools are related to classroom learning. **Educ 246** and **Psyc 201** will be useful, though they are not required.

308 Human Development

4 credits

A study of the development needs of a child from birth through adolescence with particular emphasis on physical, mental, emotional and social growth. Guided experiences with children and a case study of one child are expected. This course is recommended for early childhood/elementary and middle school majors. Prerequisite: **Psychology 201** or its equivalent.

315 Educational Psychology

4 credits

A study of learning theories, process evaluation, and strategies will be the major focus of the course. Practical application of these emphases will be included so as to prepare the student for the internship experience. Prerequisite: **Psychology 201** or its equivalent.

341 Language Arts and Curriculum Content K-12

4 credits

This course is an introduction to the application of theories of language arts development in K-12 curriculum. Students will study current educational practices and their relation to small group classroom processes, the range of currently available language arts teaching materials, and the relationship of language arts processes to student learning in different content areas. Students will write plans for the use of language arts in a range of content areas, K-12. Student will be exposed to the application of developmental speaking, reading and writing in all content areas, and to the role of evaluation as an effective teaching tool in language arts development. All students will understand and create a unit plan for six weeks of teaching in a specific content area; this plan should incorporate what has been learned about language arts development K-12 and will serve as the launching point for student-centered-classroom laboratory experiences.

355 Introduction to Exceptional Children

4 credits

This course is designed to expose the student, through readings and field experiences, to the unique educational needs of exceptional children (academically gifted, uniquely talented, disabled, handicapped). Prerequisites: **Psychology 201** and **303** or its equivalent, and/or permission of the instructor.

420-421 Student Teaching Internship

5 credits each

Under the direction of a qualified public school cooperating teacher and a college supervisor, a full-time, continuous teaching experience is carried out. Student internships will usually take place during the fall term, and may begin during workdays at the assignment location. Presently, students are assigned to the Hoke, Lumberton City, Moore, Richmond, Robeson and Scotland County Schools.

425 Seminar/Practicum

4 credits

A course designed to serve a dual role of interaction with others during the regular student teaching internship experience as well as a means of completing additional competency needs as determined on an individual basis. The latter facet of the course may involve experiences in reading, special education, media, computers, museums, etc.

453 Psychology and Education of the Gifted

4 credits

A study of research findings on gifted, talented and bright underachieving students. The social, emotional, physical and intellectual characteristics of such persons will be investigated in order to focus upon appropriate teaching/learning requirements in special mainstreaming/learning environments.

455 Curriculum and Instruction — Gifted

4 credits

This course will provide opportunities to explore the major conceptual models used as paradigms for education of the gifted. The work of theorists/practioners such as Guilford, Gallagher, Renzulli, Torrence, Mager, Taba, Brunner and Williams will be included as students address the basic questions of how and what we are to teach gifted students. Topics/issues to be covered will include: acceleration and/or academic enrichment, administrative arrangements; curricular modifications; questioning techniques; critical thinking skills; moral education; selection of materials; and selection and training of teachers of the gifted.

480 Supplemental Certification Internships

4 credits

This experience involves serving a 100-hour internship to meet the requirements for the second certification level and in teaching physically handicapped or gifted/talented students. Under the supervision of a qualified cooperating teacher and a college supervisor, and where logistically feasible, the intern may be placed during any term, including summers. Certified and presently employed teachers whose assignment is with gifted and talented or physically impaired students will be able to complete this requirement through teaching-related assignments. Prerequisites: **Education 420** and **Education 421** or their equivalent.

190, 290, 390, 490 Special Studies in Education

195, 295, 395, 495 Internships in Education

198, 298, 398, 498 Teaching/Practicum in Education

199, 299, 399, 499 Guided Independent Study in Education

History

Professor Melton; Associate Professors Schulz and Roper (on leave 1987-88); Assistant Professors Clark (Chair) and Tom Williams

Central to humanity is the impulse to find a place in time; to take account of and deal with change; to sift through the sands of the past for the occasional bright gem which is timeless. History is the study of such things, and the program at St. Andrews encourages students to sift through sands from many places; from Scotland County to Peking, from Tudor England to modern Zaire, from Brasilia to Periclean



Greece. Students are offered courses which provide a base of knowledge along with exposure to the many techniques in historical research. The faculty in the program, through the **Pi Gamma Mu** honorary society for social sciences bring their own research before students, and advanced students also use **Pi Gamma Mu** to display their own works on a variety of topics.

Major in History

A standard major in history consists of twelve courses in history, including six history courses at the 300-400 level. One winter term history course may be included as a part of the history major.

Contract Major in History

A contract major in history consists of twelve to fifteen history and related courses carefully selected to meet the individual needs of the student. At least half of the courses in the contract must be history courses. A minimum of six history courses at the 300-400 level is required. Typical contract options are as follows: American studies, European studies, history for pre-law, history for journalism, history for government service, history for divinity studies and history for careers in business.

History Minor

The history program offers a minor in history to any St. Andrews student who meets the requirements for the college minor, that is, a minimum of six courses, at least half of which are upper-level. Declaration forms are available in the office of the registrar.

It is suggested, but not required, that students seeking the minor take the guided independent seminar, "**Topics in History**," with Professors Clark and Roper.

The history minor may be conducted by contract or as outlined in the college catalog.

Courses in History

Those courses numbered 300 and 400 levels are restricted to juniors and seniors except by consent of the instructor.

101 Western Civilization I

3 credits

A study of the main trends of select periods in western civilization from ancient Greece and Rome to 1650, including medieval civilization, the Renaissance, the Protestant Reformation, the Age of Discovery and the formation of the Nation States.

102 Western Civilization II — Comparative Revolutions

3 credits

This is a course in modern western civilization organized around the theme of comparative revolutions. Emphasis is placed on the comparative study of the English Revolution, the American Revolution, the French Revolution, the Russian Revolution and the Nazi Revolution.

201, 202 American Civilization

3 credits

An integrated, year-long study of the development of American culture from colonial settlement to the age of modernism. **History 201** includes: 1) *Colonial Paradox: Syzygy Present at the Creation*; 2) *Classicism and Republicanism*; 3) *Romance as a Way of Thought and of Life: the Displacement of Reason with Will*; and 4) *Liberal Rationalism in Conflict with Traditional Seigneurialism*. **History 202** includes: 1) *Reconstruction: Political Unity and the Deferred Commitment*; 2) *Vox Populi*; 3) *the Plan of Progress*; 4) *Modernism*. Each course does stand alone and each may be taken separately, although the year's study is designed to train a student how to think critically about her or his cultural heritage from the past in this country.

204 Modern Asia

3 credits

The political history of Asia in the modern period with emphasis on responses of the West, such as passive resistance in India, militarism in Japan and revolution in China. (Offered also as **Politics 204.**)

302 History of Economic Thought

4 credits

A history of the main currents of economic thought since the eighteenth century, including such economists as Adam Smith, Karl Marx, John Maynard Keynes and Milton Friedman. (Offered also as **B/E 302.**)

311 The Founding Fathers

4 credits

A study of the men called “the Founding Fathers” who wrote the Declaration of Independence, the United States Constitution and the Bill of Rights. What kind of men were they, what were their ideals and self-interests, and what were their world views? Did their personal lives help or hinder their contribution? How were they alike and how were they different?

330 The Old South

4 credits

It is said, usually rather wistfully, that once, it was different “down here.” In fact, the antebellum South *was* markedly different from the rest of the United States, exhibiting distinctive traits which set it off from the rest of the country as early as the seventeenth century colonial experiences. Yet, those who languish in melancholic thoughts about the disappearance of moonlight and magnolias have missed the point about the things which made the Old South different. A hard-headed look back without tears or anger at what was—with a long pause to consider what remains with us still.

331 The New South

4 credits

Defeat in the Civil War not only wrecked the economy of the old plantation system but it also marked “the surrender of a point of view.” The violent race relations, the brutal poverty of the farms, the class warfare in the milltowns are counterbalanced by marvelous achievements in literature and the arts. This course serves up the whole New South, “the best of times, the worst of times.”

332 Slavery in Comparative Perspective

4 credits

A study of slavery in which the concept of thralldom is examined from the points of view afforded by different societies and different generations which have employed "the peculiar institution." Topical treatment of the development of slavery from the ancient Greeks, through the medieval Middle East, and concluding with slavery in the Americas; two historians utilize the methodologies of various disciplines in the humanities and social sciences. The course is developed cognitively around five general areas: 1) *Slavery as a Philosophical Problem*; 2) *Comparative Analysis of Slave Societies*; 3) *The Historiography of Slavery*; 4) *Afro-American Folklife under Slavery*; and 5) *Slavery in Microcosm*.

334 Civil War and Reconstruction

4 credits

A study of the era of the American Civil War. The causes of the war, the military campaigns and the era of Reconstruction will be considered. Special emphasis will be given to interpretations of the era, the impact of military technology and doctrines of war on the campaigns, and the significance of Reconstruction for the South.

353 The Age of the French Revolution

4 credits

A study of continental Europe between 1763 and 1850 with emphasis on the decline of the Old Regime, the crisis of the French Revolution, the reorganization of Europe under Napoleon and the Congress of Vienna, and European revolutions of 1820, 1830 and 1848.

355 The Turn of the Century and World War I

4 credits

A history of Europe from the 1870's until 1918 with emphasis on the causes of World War I, the military campaigns of 1914-1918, the Russian Revolution and the impact of science, technology and industrialism on the late nineteenth and early twentieth centuries.

356 The Decades of the Second World War

4 credits

A study of the backgrounds of World War II, the military campaigns of 1939-1945, the home fronts, Nazi occupation regimes, resistance movements, propaganda, wartime diplomacy, the role of science and the impact of total war on modern society.

361 East Meets West

4 credits

This course will explore the thoughts, beliefs and lives of people in the medieval world. The focus will be on the similarities and differences between medieval western society and the Muslim Middle East especially in the twelfth and thirteenth centuries. Among the questions considered will be: what was the social structure of the two societies? What were the bases of the religious similarities and differences between Christians and Muslims? What were the relations between East and West and what were the major contributions of each to the other's society and culture?

362 Europe During the Renaissance and Reformation

4 credits

This course is a study of Western European history from the fourteenth century through the end of the seventeenth century. The major focus of the course will be the events, people and ideas that shaped our modern world: the growth of individualism; the Protestant Reformation; secularism; the "scientific revolution;" the creation of the "modern" state; the changing status of the family, women and children; the artistic and literary Renaissance; etc.

422 Senior Seminar

4 credits

Required of all majors; recommended for those seeking to establish a minor.

An introduction to the basic ways of thinking employed by practicing historians, with attention to main currents of historical interpretation and significant bibliography. All members of the history program have cooperated to prepare this course, and each faculty member will discuss an area of his or her own research with the members of this seminar. In addition, seminar members will learn search strategies in primary archival sources and primary oral sources while also developing the kind of critical, analytical reading and thinking crucial to the discipline.

190, 290, 390, 490 Special Studies in History

These courses are offered at irregular intervals to meet changing students needs. Examples of the type of courses offered from time to time as the need arises are England under the Tudors and Stuarts, Latin American history, the ancient world, Pearl Harbor, N.C. history, history of ancient and medieval Science, English constitutional history, modern middle eastern history and the Vietnam era.

299, 395, 399, 499 Guided Independent Study in History



Politics

Professor Bushoven; Associate Professor Schulz (Chair); Assistant Professor Johnakin

Major in Politics

The major in politics is just that - a major in the polis - the community. It is not a major in political science as a rigid methodology. Although any person wishing to enter graduate school can acquire more than the necessary methodological knowledge and skills, that is not the primary focus of the major. The politics major at St. Andrews is a study of needs, of cooperative ways for individuals and groups (large and small) to fulfill those needs, of accomplishment through caring and through leadership, and of personal fulfillment through interaction with oneself, others and the planet. While concerned with helping the student prepare for an entry level work position, the politics faculty is much more concerned with preparing the student to be a leader in his or her personal and civic life. The commitment of the program is to respect students, help sharpen their opinions, aid them in acquiring skills and knowledge which will result in mature decisions, and help them to develop self-confidence and self-awareness - so that as mature adults their education does not fail them and they do not fail their education.

The politics department has no set program to which all majors must adhere. Instead the department operates a contract system under which students can initiate major programs tailored to their own academic needs and goals. The major requirements in politics therefore consist of a standard or individualized contract which includes all other degree requirements and which is mutually acceptable to the student and to the faculty in politics. The acceptance of a student as a major in politics includes the acceptance of his

or her contract. The contract will become part of the student's permanent record and any changes in the contract must be approved by the student and the faculty in politics.

Requirement for the Major:

- 1. **Politics 201 - Introduction to American Government**
- 2. **Politics 202 - Introduction to Politics**
- 3. **Politics 223 - Methods of Political Analysis**
- 4. **Skill Requirement - At least one of the following**

Math 205 - Statistics
Computer Science 190 - Introduction to Computers
Computer Science 110 - Introduction to Computer Science
Foreign Language 301
Foreign Language 322 - Advanced Composition and Conversation
Foreign Residency which includes course credit

- 5. **At least five politics courses in one of three areas of concentration. No more than two 200-level courses may be counted.**
- 6. **At least three politics courses in a second supporting area, and at least two politics courses in a third supporting area. Of these five courses, no more than two 200-level courses may be counted.**

Area I	Area II
Politics of Behavior	American Government and Law
Politics 218	Politics 231
Politics 266	Politics 245
Politics 276	Politics 281
Politics 321	Politics 301
Politics 323	Politics 305
	Politics 306
	Politics 312
	Politics 315
	Politics 360
	Politics 361

International and Comparative Politics**Politics 204****Politics 211****Politics 253****Politics 339****Politics 342****Politics 356****Politics 357**

The following courses may be assigned to any of the three areas:

Politics 290,390,490**Special Studies****Politics 291,491****Honors****Politics 295,395,495****Internships****Politics 398,498****Research Teaching Practicum****Politics 299,399,499****Guided Independent Studies**

Individualized Contract in Politics

Although most students will follow the schedule outlined above, some may wish to arrange a contract major in politics in such areas as: international studies, pre-law, women's studies, and practical politics. The contract major requires **Politics 201**, **Politics 202**, and at least six other politics courses at the 300-400 level. The balance of courses (up to 14) will come from other programs appropriate to the contract theme and to the goals of the student. Of the 14 courses in the contract, ten must be at the 300-400 level.

Minor in Politics

A minor in politics consists of at least six courses in politics, one-half of which must be at the 300-400 level. **Politics 201** must be included in the six courses.

For Students Interested in Legal Careers

St. Andrews offers a pre-law concentration as a preparation for law school and career opportunities in state and local governments, public administration, criminal administration and rehabilitation, and the paralegal field. Pre-law students may elect any major program, and are encouraged to take courses in a wide variety of subjects.

In the politics department, the student may take **Introduction to Law, Legal Reasoning, Business Law, Philosophy of Law, International Law, and Comparative Legal Systems**. The student is strongly encouraged to work closely with the pre-law advisor and to take an internship with an agency or with a practicing attorney.

Internships

The politics department has placed over 50 state and local interns in government and various agencies in the past several years. Students regularly serve as interns with Congressional offices, the Laurinburg City Planning and Community Development Offices, county agencies and law offices. Work has included the preparation of bills, testimony before committees, study of the possibilities of waste recycling in the county, and the consolidation of various planning reports into one overall plan for the city. Application is made to the politics department. Those selected enroll in politics internships.

Honors in Politics

A major may, upon recommendation by the faculty and certification by the dean of the college, receive the designation "honors in politics" after successful completion of the following:

1. A cumulative grade point average of 3.0 or better on all course work required for the major in politics;
2. Eight credits of **Politics 491 Honors Seminar** during the fall and spring terms of the senior year.
3. A year-long honors thesis on a topic approved by the faculty;
4. Periodic approval for continued work on the honors thesis (see explanation below);
5. A defense of the honors thesis in a comprehensive oral examination before an examining committee which includes the faculty in politics, one faculty member outside the department, and/or one additional outside examiner. The exam will be open to the public.

To be eligible for "honors", a student enrolled in **Politics 491** must receive continuing written approval throughout the seminar at periodic intervals. Such approval will be contingent upon sustaining an excellent level of progress on reports and draft papers. Written guidelines and evaluations will be made available to all seminar participants. Failure to receive such approval does not in any way jeopardize a student's grade or standing in the continuing work of **Politics 491** throughout the year.

Should a student complete the work in the honors seminar but not meet the minimum standards in the examination, he or she will not be designated as an "honors" graduate.

Courses in Politics:

201 Introduction to American Government

3 credits

An introduction to American government and to the discipline of political science designed to: 1) develop an understanding of how the American political system

works 2) stimulate an awareness of why some political events occur and others do not, and 3) encourage the development of a perspective from which political events can be evaluated.

202 Introduction to Politics

3 credits

Intended as a first course in politics. An introduction to the important issues and methodologies of political science. The content will consist of a series of related modules on such topics as: the individual as a political actor, the group basis for politics, the societal environment of attitudes and values, and the global dimensions of political life.

204 Modern Asia

3 credits

The political history of Asia in the modern period with emphasis on responses to the West, such as civil disobedience in India, militarism in Japan, and revolution in China. (Offered also as **History 204**)

211 Introduction to International Politics

3 credits

An introduction to the political relations of nations, including theories and levels of analysis. Use of case studies and simulation gaming to explore normative issues in both contemporary and preferred future global systems.

218 Social and Political Philosophy

3 credits

(See **Philosophy 218**.)

223 Methods of Political Analysis

3 credits

An introduction to political analysis. Perspectives, approaches, and values in political analysis will be examined. Data and primary sources in the library as well as quantitative techniques will be introduced.

231 Introduction to Law

3 credits

A study of the nature of law and its most general functions. Areas covered include: judicial decision making; certain aspects of the law of civil and criminal procedures; the law of contracts; legal reasoning; and judicial remedies. Field trips to trials, films, guest speakers, etc.

245 State and Local Government

3 credits

An introduction to the machinery of government at the sub-national levels. Emphasis is placed on the processes of state and local politics, intergovernmental relations among national, state and local levels, and the changing features of subnational politics.

253/353 European Governments

3/4 credits

A comparative study of institutions and functioning elements, such as political parties and elections, in similar and dissimilar political systems. Methods of comparative political analysis with primary focus on European nations.

266 Politics of Sex

3 credits

An exploration of the political nature of the roles and relationships of males and females in the United States and other countries. Analysis of human sexual conduct and reproduction as defined in the laws of the United States.

276 Politics of Behavior

3 credits

An introductory exploration of the political dimension of every day behavior in such settings as the family, the classroom, mental institutions, the factory, and the armed services and in relationships such as between lovers, therapist and client, child and patient, and minister and congregation.

281 Contemporary Political Issues

3 credits

A critical examination of selected contemporary domestic and international policy issues. During the first half of the course students will be required to keep abreast of current events through subscriptions to magazines such as *Time*. During the second half of the course attention will be focused on the American presidency. (During election years candidates for this office will be studied and analyzed.)

305 The Presidency

4 credits

Examination of the office, roles, and power of the American presidency. The changing nature of the office, presidential personalities, decision-making and leadership in domestic and foreign affairs will be studied. Relations with the public, Congress, the courts, the federal bureaucracy, and the press will also be considered.

306 Congress and the Legislative Process

4 credits

Focuses on the internal processes of the House and Senate and on the role of Congress in the American political system. Committee behavior, leadership patterns, informal organization and the legislative process. Relations between the executive and the legislative branches of government will be considered, as well as the relations between the two houses of Congress.

312 Legal Reasoning

4 credits

An intensive study of case law and legislation to introduce students to the tasks and modes of thought of lawyers and to gain insights and skills required in case analysis and the interpretation of statutes. Areas studied include: the analysis and synthesis of judicial decisions in the federal courts.

315 Business Law

4 credits

(See **Business/Economics 315**.)

321 Political Thought: Classical to Modern

4 credits

A study of the classics in political thought from Plato to the present. Emphasis is placed on their relationship to contemporary conditions.

Original texts are used.

323 Marxian Political Analysis

4 credits

Grounding in the basic texts, Marx to Mao, and basic concepts. Analysis of contemporary national and international politics from a Marxist perspective. (Offered also as **Philosophy 323**.)

333 Philosophy of Law

4 credits

(See **Philosophy 333**.)

339 War and Peace

4 credits

A study of the historical, psychological and social roots of war and the contemporary issues of peace. An introduction to problems of research in peace and conflict studies. Areas investigated included arms control and disarmament, international organization, and preferred future modeling.

342 Foreign Policy Processes

4 credits

Detailed study of the governmental machinery and external influences on the formation and implementation of foreign policy.

356 Asian Politics

4 credits

A critical examination of modernization theory and a comparative analysis of political structures and processes of change in selected countries of Asia.

357 African Politics

4 credits

A comparative analysis of the politics, history, and culture of Africa.

Politics 360 International Law

An introduction into the major areas of international law which include: historical perspective; the nature, sources and application of international law; major theoretical approaches; the individual in international law; land, air and space law; the law of the sea and the use of force. The interaction between law and politics will be emphasized and contemporary problems in the field will be examined. The question of whether a world order is possible will be constantly addressed as the student gains greater understanding of the rules, processes, successes and failures of the international legal system. No prerequisites.

Politics 361 Comparative Legal Systems

A critical examination of the legal systems of selected countries for the purpose of gaining an international perspective on the varied techniques utilized for resolving conflicts and addressing social problems, and how these various examination of the legal systems selected, the student will gain a "world view" understanding of political values, the meaning of justice, and the criteria for responsible judgement. An eclectic approach to developing a model apparatus for conflict resolution will be utilized. Prerequisite: **Politics 231 Introduction to Law** or permission of instructor.

190,290,390,490 Special Studies in Politics

291,491 Honors

3-4 credits

May be taken as **Politics 291** in the sophomore year for 3 credits, and as **Politics 491** in the senior year for 4 credits. Admission by nomination of the politics faculty. This course may be taken more than one term for credit.

195,295,395,495 Internships

The assignment to a private, public or quasi-public official for an on-the-job experience. Interns have served with the city manager, the county manger, the county attorney, a state representative, the N.C. Commission on Women, lawyers, and other institutions and organizations.

Selected by the staff of the politics department.

398,498 Research/Teaching Practicum

199,299,399,499 Guided Independent Study in Politics

Psychology

*Professor A. Smith; Associate
Professor Cabe; Assistant
Professors J. Franz (Chairper-
son) and Knight*



Major in Psychol- ogy

All majors and minors are designed in consultation with an advisor. A minimum of 52 credits is required for a major in psychology distributed as follows:

- 8 credits. . . **Psychology 201 and 202** with their respective laboratories
 - 26 credits. . . At the 300-400 level. Of these 26 credits, a minimum of 1 lab credits (2 are recommended) and a minimum of 4 credits from a 400 level seminar course are required.
 - 9 credits. . . A minimum of 3 credits in each of the three core areas specified below.
 - 3 credits. . . **Math 205** is required of all majors
 - 3 credits. . . **CS 100 or CS 110** required*
 - 3 credits. . . General math requirement*
-
- 52 credits. . . TOTAL

* Competence in a foreign language (4 courses for students with no previous coursework in that language) may be substituted for the requirements marked by an asterisk(*).

Core Areas in Psychology

Area I	Area II	Area III
Psychology 220/320	Psychology 211/311	Psychology 304
Psychology 235/335	Psychology 230/330	Psychology 314
Psychology 301	Psychology 307	Psychology 360
Psychology 303	Psychology 316	Psychology 190-49
Psychology 403	Psychology 407	Psychology 199-499
Psychology 420	Psychology 418	
Psychology 190-490	Psychology 190-490	
Psychology 199-499	Psychology 199-499	

Contract Major in Psychology

For students whose needs are different from the standard major in psychology a contract major may be arranged in consultation with the psychology faculty.

A minimum of 52 credits is required for a contract major in psychology distributed as follows:

- 8 credits. . . **Psychology 201** and **202**, with their respective laboratories
 - 3 credits. . . **Math 205** is required
 - 25 credits. . . At the 300-400 level. Of these 25 credits, a minimum of 1 lab credit and a minimum of 3 credits from each of the three core areas is required.
 - 16 credits. . . Supporting course credits, of these credits a minimum of 4 credits at the 300-400 level are required.
-
- 52 credits. . . TOTAL

Some examples of contract majors might be biopsychology, psychology and art, psycholinguistics, psychology and music, psychology and business, and others as appropriate to the needs of individual students.

Bachelor of Science in Psychology

The Bachelor of Science degree is a special type of contract major with the following requirements (all courses selected in consultation with the psychology faculty):

- 8 credits. . . **Psychology 201** and **202** with their respective laboratories
- 26 credits. . . At the 300-400 level. Of these 26 credits, a minimum of 1 lab credit is required (more recommended).
- 16 credits. . . From the areas of biology, chemistry and physics. A minimum of 8 credits each is required from two of the above areas.
- 9 credits. . . From mathematics and/or computer science

59 credits. . . TOTAL

The B.S. degree is recommended for students interested in pre-medicine, life sciences or in graduate training (e.g., biopsychology, cognitive psychology, clinical psychology, general experimental psychology, medical psychology).

Minor in Psychology

A minor in psychology consists of a minimum of 24 credits. Of these 24 credits, a minimum of 12 credits is at the 300-400 level and 3 credits from each of the three core areas is required. **Psychology 201** and the corresponding lab are also required for a minor in psychology.

Honors in Psychology

A student majoring in psychology may, upon recommendation by the program and certification by the dean of the college, receive the designation "honors in psychology" after successful completion of the following:

1. A cumulative grade point average of 3.0 or better on all course work, and a 3.3 or better on all course work required for the major in psychology;
2. A minimum of eight credits of honors course work in psychology;
3. An honors thesis or project on a topic approved by the program faculty;
4. A defense of the honors thesis or project in a comprehensive oral examination before an examining committee which includes the program faculty, one faculty member outside the program and one additional examiner.

Internships

The clarification of educational and personal goals and values is the ultimate objective for psychology internship students. An internship can enhance learning in the academic world and provide an opportunity to apply and test knowledge of psychology in a practical professional-world setting.

Internships may be taken during any academic term, and can be arranged with a variety of institutions and agencies across the country. Students interested in internships have several options available, ranging from 1 to 5 credits fall and spring terms and 3 credits winter term, depending on their level of interest and training.

Courses in Psychology

201 Introduction to Psychology

3 credits

An introduction to the basic concepts, methods, issues and theories of psychology including such topics as the biological bases of behavior, perception, learning and memory, human development, motivation, personality, social influences, and pathological behavior. To be taken concurrently with **201 Lab** for laboratory science breadth credit.

201 Introduction to Psychology Lab

1 credit

Research, demonstrations and other opportunities for direct experience with the concepts studied in **Psy. 201**. Concurrent enrollment in **Psy. 201**, or consent of the instructor.

202 Experimental Methods in Psychology

3 credits

A careful study of the methods of research design employed in psychology.

This course includes discussion of appropriate methodology for conducting research on selected topics presented in **Psy. 201**. Lecture four hours. Prerequisite: **Psy. 201**; prerequisite or corequisite: **Math 205**; corequisite: **202 Lab**.

202 Experimental Methods Laboratory

1 credit

Experimental investigations of selected topics applying research methods and statistical analyses presented in **Psy. 202**. Must be taken during the same term as **Psy. 202**.

211 Introduction to Perception

3 credits

Current theories and research in perception with applications for the visual arts, music and theater. Basic perceptual processes in vision, audition, tactile and kinesthetic areas will be presented.

311 Advanced Perception

4 credits

Students enrolled in this course will complete requirements for **Psy. 211**, in addition to more in depth reading and analysis of selected theories and research literature. May be taken concurrently with **311 Lab**. Prerequisites: **Psy. 201**. **Psy. 202** is recommended. Students may not receive credit for both **Psy. 211** and **Psy. 311**.

311 Advanced Perception Laboratory

1 credit

An individual or small group student-developed research project will be conducted. Laboratory demonstration will be developed for presentation to students enrolled in **Psy. 211/311**. Prerequisites: **Psy. 201**. **Psy. 202** encouraged. May be taken concurrently with **Psy. 311**.

220 Social Psychology

3 credits

A survey of theory and research concerning the behavior of individuals in a social context. Topics include social perception, attitude formation and change, conformity, aggression, prosocial behavior, leadership and social power, cooperation and competition, group dynamics, privacy, and environmental psychology. Applications of social psychological principles to health care, politics, business, education and interpersonal communication are considered.

320 Experimental Social Psychology

4 credits

Students enrolled in this course will complete assignments required for **Psy.**

220 and a term research project. Prerequisites: **Psy. 201**; **Psy. 202** is recommended. Students may not receive credit for both **Psy. 220** and **Psy. 320**.

320 Experimental Social Psychology Laboratory

1 credit

In depth analysis of selected theory, research and application in social psychology, followed by development of original student research. Prerequisites: **Psy. 201**. **Psy. 202** is recommended. To be taken concurrently with **Psy. 320**, or after completion of **Psy. 220**.

210/310 Religion and Psychology: A 20th Century Dialogue

3/4 credits

See **Religion 210/310**.

230/330 Drugs and Behavior

3/4 credits

An examination of the ways in which drugs influence the body to produce their effects on behavior and mental processes. This course will introduce students to the biochemical and physiological systems that mediate the effects of drugs on the behavior of humans and animals. It will also include discussions of the influence of drug use and abuse on the individual and society. Students desiring **330** credit will be required to write a library research paper. Prerequisites: none for **230**. Consent of instructor for **330**. Offered on demand.

235/335 Organizational Behavior

3/4 credits

Integrates the study of social psychology and management and applies knowledge from these areas to understand behavior of individuals working together in groups. Topics include leadership and power, group decision-making, communication, conflict resolution, motivation, and group socialization and development. Using lecture, discussion, case study and simulation methods, the course will encourage students to apply principles to specific organizations (also offered as **B/E 355**). Prerequisites: None for **Psy. 235**; one course in psychology, **B/E 120** or **B/E 325** for **Psy. 335**.

301 Personality Theory and Research

4 credits

An overview of current and classical theories of personality, assessment of personality, and research on individual differences, issues in theory construction as well as assumptions underlying specific theories will be examined. Research topics will

include stability and change in personality, reliability and validity of personality assessment, individual differences in dealing with stress, and the interaction of personality and social context in the behavior of individuals. Prerequisites: **Psy. 201** and **Psy. 202** or consent of the instructor.

303 Developmental Psychology

4 credits

A general survey of change during the lifespan of the individual from conception to death. The course of development is described and biological, cognitive and psychosocial determinants of change are explored. Prerequisites: **Psy. 201**; **Psy. 202** is encouraged.

303 Developmental Psychology Lab

1 credit

Research in the community and in the laboratory will be conducted with children, adolescents and adults. Field trips and movies will be used to supplement this experiential course. **Psy. 202** or permission of instructor required.

304 Behavior Pathology and Therapy

4 credits

An investigation of the factors, processes and conditions which cause personality deviations (neuroses, psychoses, mental deficiencies). Also, abnormal behavior patterns are identified and appropriate therapeutic techniques are considered. Prerequisites: **Psy. 201** or consent of instructor.

305 History and Systems of Psychology

4 credits

A careful study of the history of psychology and the approach of the various systems of psychology to the study of human and animal behavior. Prerequisites: **Psy. 201, 202** or consent of instructor.

307 Physiological Psychology

4 credits

An investigation of the biological bases of behavior. The course begins with discussion of the basic neurosciences to provide a foundation for discussion of biological process that control the sleep-walking cycle; regulation of food and water intake; sexual, maternal and aggressive behavior; reward and punishment; learning and memory; and language. The biological bases of mental disorders will also be discussed. Prerequisites: consent of the instructor.

307 Physiological Psychology Laboratory

1 credit

Research on the biological bases of behavior using laboratory animals applying

techniques and methodology presented in **Psy. 307**. Prerequisites or corequisite: **Psy. 307**; consent of the instructor required.

314 Counseling Principles and Theories

4 credits

The purposes, processes, organization and resources for guidance and counseling are considered. Special attention will be given to understanding and dealing with adjustment problems, including, consideration of some case studies and a practicum in counseling techniques. Prerequisites: **Psyc.201, 202** and other courses in psychology and consent of the instructor.

316 Human Learning and Cognition

4 credits

An investigation of the theories and empirical findings of human learning and cognition including such topics as conditioning, verbal learning and memory, language, motor skills learning, and problem-solving.

316 Human Learning and Cognition Laboratory

1 credit

Research, demonstrations and other opportunities for direct experience with concepts studies in **Psy. 316**. Prerequisites: **Psy. 201; Psy. 202** encouraged; concurrent enrollment in **316**.

360 Educational and Psychological Evaluation

4 credits

A survey of the concepts, techniques and instruments for the assessment of personal needs and potential. Special emphasis is placed on the applications of teaching the emotionally handicapped and the gifted and talented students (offered also as **Educ. 351**). Prerequisites: **Psy. 201, Math 205** and consent of instructor.

360 Education and Psychological Evaluation Lab

1 credit

Students will administer, take and score various evaluation instruments in intelligence, personality, academic achievement and other areas. Corequisite: **Psy. 360** or **Educ. 351**. Must be taken during the same term as **Psy. 360/Educ. 351**.

403 Gerontology

4 credits

Gerontology is a comprehensive and systematic study of aging; it is a multidisciplinary study of changes that occur in the biological, cognitive and psychosocial domains of the individual with age. Current research, theory and application are the focus of the course. Using lecture, discussion, community contact, field trips and projects, the course

encourages the perspective that aging can occur with quality and dignity. Prerequisite: consent of instructor.

407 Advanced Physiological Psychology

4 credits

Advanced study of research and methods in physiological psychology. Lecture: four hours; laboratory: three hours. Prerequisites: **Psy. 201, 202 and 307**. Offered alternate years on demand.

407 Advanced Physiological Psychology Laboratory

1 credit

Research on the biological bases of behavior using laboratory animals applying techniques and methodology presented in **Psy. 407**. Prerequisite or corequisite: **Psy. 407**; consent of instructor required.

411, 412, 413, 414 Psychology Seminar

1-4 credits

Each time this course is taught, there will be a different set of problems to be considered. In general, the focus will be upon contemporary problems in psychology, with emphasis upon professional concerns, ethical problems, debates in psychology, current issues in research and other matters of concern to the class. This course may be taken more than once for credit. Prerequisites: At least 4 courses in psychology and consent of the instructor.

416 Advanced Experimental Psychology

5 credits

A continuation of **Psy. 202** with special emphasis upon advanced experimental designs and advanced experimental techniques for conducting psychological research. The student will be expected to conduct at least one major experimental project as a part of this course. Prerequisites: at least six courses in psychology including **201 and 202**. Offered on demand in alternate years.

420 Advanced Social Psychology

4 credits

Advanced seminar study of social psychological processes introduced in **Psy. 220/320** with emphasis on special topics in current theory, research and/or application. Prerequisites: **Psy. 201, 202 and 220/320**, or permission of the instructor.

420 Advanced Social Psychology Laboratory

1 credit

Individual and small group research on current issues in social psychology. Prerequisites: **Psy. 201, 202, 220/320** or permission of instructor. To be taken concurrently with **Psy. 420**.

190, 290, 390, 490 Special Studies in Psychology

391, 491 Junior and Senior Honors in Psychology

4 credits

An investigation of research literature in psychology or a research investigation of a psychological topic. Admission by nomination only.

195, 295, 395, 495 Internships

1-5 credits

398, 498 Research/Teaching Practicum

Research and/or teaching experience for advanced students arranged with an individual professor. The work may involve any or all of the following: assistance to the professor in research design, experimental apparatus design, literature review, data collection and analysis, the preparation of manuscripts, the teaching under supervision of a portion or portions of a course. Instructor's consent required prior to registration.

199, 299, 399, 499 Guided Independent Study in Psychology



The Faculty 1987-88

Full-Time Faculty

(the date following the name indicates the year of appointment)

William M. Alexander (1961), *Distinguished Professor of Philosophy and Religion*. B.A., Davidson College; B.D., Louisville Presbyterian Theological Seminary; S.T.M., Harvard University; Ph.D., Princeton Theological Seminary.

Arthur L. Applegate (1970), *Associate Professor of Biology*. B.S., Wake Forest University; M.S., University of South Carolina; Ph.D., Emory University.

Ronald H. Bayes (1968), *Writer-in-Residence and Professor of English*. B.S., M.S., Eastern Oregon College; University of Pennsylvania, 1959-60, Litt. D.M., Universita Delle Arti.

Carl D. Bennett (1959), *Distinguished Professor of English*. B.A., M.A., Ph.D., Emory University.

Margaret W. Bennett (1960), *Serials Librarian and Cataloger with the rank of associate professor*. B.A., Valdosta State College; A.B. in L.S., Emory University.

Thomas L. Benson (1986), *Vice President and Dean of the College and Professor of Philosophy*. B.A., Augustana College; B.D., Harvard University; M.A., Ph.D., The Johns Hopkins University.

David K. Beyer (1986), *Associate Professor of Theatre and Chairman of the Theatre Program*. B.A., Weber State College; M.F.A., University of Michigan.

Thomas R. Blackburn (1978), *McGaw Professor of Chemistry*. B.A., Carleton College; M.A., Ph.D., Harvard University.

Norman T. Boggs III (1982), *Associate Professor of Chemistry*. B.A., Hamilton College; Ph.D., State University of New York at Buffalo.

Mary Louise Bringle (1983), *Assistant Professor of Religion*. B.A., Guilford College; M.A., Ph.D., Emory University.

Janice J. Burgess (1987), *Assistant Professor of Theatre*. B.S., Portland State University; M.F.A., University of Oregon.

- Cornelius Bushoven III** (1969), *Associate Professor of Politics*. A.B., Davidson College; M.S., Ph.D., Duke University. (On leave fall term 1987-88)
- Robert Carter** (1984), *Associate Professor of Art*. B.A., M.F.A., Florida State University.
- Charles W. Clark** (1983), *Assistant Professor of History*. B.A., Colorado College; M.A., Ph.D., University of Colorado.
- Rooney L. Coffman** (1968), *Director of Logistics and Instructor in Science Laboratories*. B.A., St. Andrews Presbyterian College.
- James M. Crabbe** (1985), *Associate Professor of Physical Education*. B.S., United States Military Academy; M.A., Ph.D., University of Iowa. (On leave 1987-88)
- Rodger W. Decker** (1952), *Director of Rehabilitation Services and Professor of Education and Psychology*. B.A., Hope College; M.S., State University of New York at Albany; Ed.D., Columbia University.
- Allen C. Dotson** (1981), *Associate Professor of Physics*. B.S., Wake Forest University; Ph.D., University of North Carolina at Chapel Hill.
- Aidan O. Dunleavy** (1986), *Associate Professor of Education and Chairman of Teacher Education*. Teaching Certificate, St. Mary's College, Middlesex, England; B.Ed., Institute of Education, University of London; M.A., Ph.D., University of Maryland.
- Clyde Edgerton** (1985), *Associate Professor of Teacher Education and English*. B.A., M.A.T., Ph.D., University of North Carolina at Chapel Hill.
- Robert A. Engelson** (1981), *Associate Professor of Music*. B.A., Augsburg College; M.F.A., University of Minnesota.
- Jackson C. Ferren** (1985), *Assistant Professor of Business and Economics*. B.S., University of Pittsburgh.
- Jonathan R. Franz** (1981), *Assistant Professor of Psychology*. B.A., Hiram College; Ph.D., State University of New York.
- Dana B. French** (1983), *Assistant Professor of Physical Education and Director of the Riding Program*. B.A., University of Tennessee; M.A., University of Hartford.

Randle Frink (1987), *Assistant Professor of Spanish*. B.A., University of St. Thomas; M.A., University of Maryland Baltimore County; Ph.D., Florida State University.

Carl W. Geffert (1963), *Associate Professor of German*. B.A., University of Virginia; M.A., University of California.

Russell L. Hauver (1984), *Assistant Professor of Mathematics and Computer Science*. B.S., M.S., State University College at Oneonta; M.S., State University of New York at Binghamton.

Elizabeth A. Holmes (1966), *College Librarian with the rank of professor*. B.A., M.A. in L.S., Florida State University.

Robert J. Hopkins (1983), *Associate Professor of Business and Economics*, B.S., Tennessee Technological University; M.S., Ph.D., The University of Tennessee.

Benjamin Reid Irvin (1981), *Assistant Professor of Chemistry*. B.A., St. Andrews Presbyterian College; Ph.D., Florida State University. (On leave 1987-88)

Jesse S. Johnakin (1981), *Assistant Professor of Politics and Business*. B.A., Fisk University; J.D., University of Detroit Law School.

Latif Ahmad Khalil (1987), *Assistant Professor of Mathematics*. B.S., M.S., University of Punjab, Pakistan; M.A.M., University of Georgia.

Martha L. Knight (1979), *Assistant Professor of Psychology*. B.A., Trinity University; M.S., Ph.D., Purdue University

James I. Lankford Jr. (1987), *Assistant Professor of Chemistry*. B.S., University of Virginia; Ph.D., University of Miami

James R. Leonard (1985), *Assistant Professor of Computer Science*. B.S., Bowling Green State University, MSCpE, University of South Florida. (On leave 1987-88)

Edna Ann Osmanski Loftus (1977), *Associate Professor of English*. B.A., Sweet Briar College; M.A., Ph.D., Princeton University.

William James Loftus (1974), *Dean of Students and Associate Professor of French*. B.A., University of Scranton; M.S., Ph.D., Pennsylvania State University.

Jonathan Andre Maisonnier (1984), *Assistant Professor of Music*. B.M., Ohio Wesleyan University, D.M.A., M.M., University of Maryland.

- Marcy R. Maurer** (1984), *Assistant Professor of Physical Education*. B.S., Ohio State University; M.S., Miami University.
- Dennis McCracken** (1981), *Assistant Professor of Biology*. B.S., M.S., East Tennessee State University; Ph.D., Wake Forest University.
- George E. Melton** (1968), *Professor of History*. B.S., Davidson College; M.A., Ph.D., University of North Carolina at Chapel Hill.
- Norman Melvin** (1980), *Assistant Professor of Biology*. B.S., Presbyterian College; M.S., Clemson University; Ph.D., Miami University.
- William H. Morgan** (1961, 1970), *Associate Professor of Mathematics*. B.S., Appalachian State University; M.Ed., University of North Carolina at Chapel Hill, Ed.D., University of Georgia.
- James C. Moss** (1986), *Assistant Professor of Music*. B.A., Carroll College; M.S., University of Illinois; D.M.A. (candidate), College Conservatory of Music, University of Cincinnati.
- Catharine E. Neylans** (1958), *Professor of Romance Languages*. B.A., Wesleyan College; M.A., Ph.D., University of North Carolina at Chapel Hill; M.A., Middlebury College.
- William A. Prosser** (1985), *Assistant Professor of Accounting and Business Administration*. B.A., Bowdoin College; M.A., Ball State University; C.P.A., Indiana, North Carolina.
- Richard C. Prust** (1967), *Professor of Philosophy*. B.A., University of Wisconsin; B.D., Yale University; Ph.D., Duke University.
- John H. Roper** (1979), *Associate Professor of History and Economics*. B.A., University of South Carolina; M.E. (Economics), North Carolina State University; Ph.D. (History), University of North Carolina at Chapel Hill.
- Lawrence E. Schulz** (1971), *Associate Professor of Politics*. B.A., University of Redlands; M.A., Ph.D., Claremont Graduate School and University Center.
- Donald G. Scoles** (1986), *Director of Athletics, Assistant Professor of Physical Education*. B.A., University of Northern Iowa; M.A., Harding University; D.A., Middle Tennessee State University.
- Franklin D. Shobe** (1985), *Assistant Professor of Mathematics*. A.B., University of Kansas; M.B.A., University of Kansas; M.A., University of Missouri-Kansas City.

- Mark A. Simons** (1986), *Assistant Professor of Physical Education and Head Basketball Coach*. B.S., Aquinas College; M.A., Michigan State University.
- Alvin H. Smith** (1965), *Professor of Psychology*. B.A., M.Ed., Ph.D., University of Missouri; B.D., University of Dubuque.
- O. Eugene Smith** (1975), *Associate Professor of Education and Communications*. B.S., M.S., West Virginia University; Ph.D., University of Maryland.
- William H. Somerville** (1971), *Jefferson-Pilot Professor of Mathematics*. B.A., King College; Ph.D., University of North Carolina at Chapel Hill.
- Barbara Steele** (1987), *Assistant Professor of Education*. B.S., Kutztown University; M.A., Ph.D., University of Connecticut.
- James F. Stephens** (1969), *Registrar, Associate Dean of the College and Assistant Professor of Chemistry*. B.S., West Virginia University; M.S., Marshall University; Ph.D., University of Tennessee.
- William A. Throop** (1981), *Assistant Professor of Philosophy*. B.A., Lehigh University; Ph.D., Brown University. (On leave 1987-88)
- Thomas E. Till** (1983), *Professor of Business and Economics*. B.A., Spring Hill College; M.A., Santa Clara University; M.A., Vanderbilt University; Ph.D., University of Texas at Austin.
- Michael A. Torres** (1977), *Associate Professor of Biology*. B.A., Angelo State University; Ph.D., Texas A&M University.
- Carl F. Walters** (1982), *Warner L. Hall Professor of Religion*. B.A., Southwestern at Memphis; B.A., Th.M., Ph.D., Union Theological Seminary.
- W.D. White** (1965), *Distinguished Professor of the Humanities*. B.A., M.A., Baylor University; Ph.D., University of Texas; M.A., Ph.D., Princeton University.
- JoAnn Williams** (1966), *Associate Professor of Physical Education*. B.A., High Point College; M.Ed., University of North Carolina at Chapel Hill.
- B. Anne Woodson** (1977), *Associate Professor of Art*. B.A., Southwestern at Memphis; M.S., Villa Schifanoia, Florence, Italy.

Adjunct and Visiting Professors 1987-88

Patrick Allen Cabe, *Visiting Associate Professor of Psychology*. B.A., M.A., University of Akron, Ohio; Ph. D., Cornell University; North Carolina State University.

Anne B. Crabbe, *Adjunct Assistant Professor of Education*. B.S., University of Wisconsin; M.A., University of Iowa; Ed.D., University of Nebraska.

Susan K. Edgerton, *Adjunct Associate Professor of Communications*. B.A., Agnes Scott College; M.A.T., University of North Carolina at Chapel Hill.

Thea S. Engelson, *Adjunct Instructor in St. Andrews General Education Program*. B.S., University of Minnesota, Minneapolis.

Grace L. Gibson, *Adjunct Professor of Literature*. M.A., Duke University.

Joseph S. Greene (1987), *Visiting Associate Professor of Mathematics*. B.S., Southwest Missouri State University; M.Ed., University of Missouri; M.S., Oklahoma State University; Ph.D., University of Missouri at Rolla, 1970.

Sara W. Hodgkins, *Adjunct Instructor in Art and Business Administration*. B.S., Appalachian State University; University of North Carolina at Chapel Hill.

Margaret S. Houston, *Visiting Assistant Professor of Anthropology*. B.A., University of Pennsylvania; M.A., Ph.D., University of North Carolina at Chapel Hill.

Rabbi Lawrence N. Mahrer, *Visiting Professor of Religion*. B.A., Ohio University; B.H.L, M.A., Rabbinic Ordination, Hebrew Union College; M.Ed. University of Missouri; D.D., Hebrew Union College, Cincinnati.

G. Tyler Miller Jr., *Adjunct Professor of Chemistry and Human Ecology* (1966). B.S., Virginia Military Institute; M.S., Ph.D., University of Virginia.

Joel Oppenheimer, *Adjunct Professor of Literature* (1982). Black Mountain College.

Elbert R. Patton, *Adjunct Assistant Professor of Psychology and Director of the Career and Personal Counseling Center* (1966). B.S., Concord College; M.A., Marshall University; Ed.D., Duke University.

Mary de Rachewiltz, *Adjunct Professor of Literature*. Litt.D., University of Idaho.

S.W. de Rachewiltz, *Adjunct Professor of Literature*. B.A., Rutgers University; A.M., Harvard; Laurea in lingue e letteratura straniere moderne, Università di Urbino; Ph.D., Harvard.

Samuel Talmadge Ragan, *Adjunct Professor of Literature* (1982). B.A., Atlantic Christian College; Litt. D., Atlantic Christian College; Litt. D., Methodist College; Litt. D., University of North Carolina Chapel Hill.

David Rigsbee, *Associate Professor of Humanities*, part time. B.A., University of North Carolina Chapel Hill; M.A., The Johns Hopkins University.

Florentino Timbreza (1987), *Visiting Professor of Philosophy*. A.B., Far Eastern University; M.A., Atenco de Manila University; Ph.D., University of Santo Tomas.

Thomas B. Williams (1987), *Visiting Assistant Professor of History*. B.A., University of Missouri; M.A., Ph.D., Ohio State University.

Emeriti

Ethel Bateman, *Associate Professor of Physical Education Emeritus*. B.A., Winthrop College; M.S., Columbia University.

P. Leslie Bullock, *Professor of Religion Emeritus*. B.S., North Texas State College; B.D., Th.M., Th.D., Union Theological Seminary in Virginia.

James E. Carver, *Professor of English Emeritus*. B.A., University of Richmond; M.S., University of North Carolina at Chapel Hill; Ph.D., New York University.

John P. Daughtrey, *Professor of Education and Psychology Emeritus*, B.S., University of Virginia; M.S., University of North Carolina at Chapel Hill; Ed.D., University of Florida.

Harry L. Harvin, *Professor of History and Politics Emeritus*. B.A., Wofford College; M.A., Ph.D., Duke University.

Herbert A. Horn, *Professor of Piano Emeritus*. B.M., DePaul University; M.M., D.M.A., University of Southern California.

Louis C. LaMotte, *Professor of Greek and Director of Summer School Emeritus*. B.A., Presbyterian College of South Carolina; M.A., University of South Carolina; B.D., Columbia Theological Seminary; Th.M., Princeton Theological Seminary; Th.D., Union Theological Seminary; D.D., Presbyterian College; L.H.D., St. Andrews Presbyterian College.

Julian L. Smith, *Professor of Physical Education and Director of Athletics Emeritus*. B.A., M.A., University of North Carolina at Chapel Hill; Ph.D., Ohio State University.

Administration, 1987-88

Office of the President

A. P. Perkinson Jr., B.A., LL.D., *President*

Jacqueline H. Singleton, B.A., *Administrative Assistant to the President*

Academic Affairs

Thomas L. Benson, B.A., M.Div., M.A., Ph.D., *Vice President and Dean of the College*

Rebecca F. Spencer, *Administrative Assistant*

David E. Rigsbee, B.A., M.A., *Special Assistant to the Dean and Director of the St. Andrews Press*

Donald G. Scoles, B.A., M.A., Ph.D., *Athletic Director*

Elizabeth A. Holmes, B.S., M.A. in L.S., *College Librarian*

James F. Stephens, B.S., M.S., Ph.D., *Associate Dean for Academic Affairs, Registrar and Director of Institutional Research*

Deborah S. Oxendine, B.A., *Assistant Registrar*

Christa G. Ladwig, B.A., *Assistant to the Registrar*

Mildred S. Peele, *Assistant to the Registrar*

W. Earl Bennett Jr., B.S., *Director, Computer and Informational Services*

Toni B. Carter, B.A., *Systems Programmer and Director, Micro-Computer Laboratory*

Timothy W. Myers, B.S., *Systems Programmer*

Admissions

Margaret G. Crawford, B.A., M.Ed., *Director of Admissions*

Shirley E. Arnold, B.A., *Director of Recruiting*

Margaret W. Abrams, B.A., M.A.T., *Associate Director*

Jean L. Lyerly, B.A., *Associate Director*

Mary Kay C. Ollis, B.S., *Associate Director*

David S. Ladwig, B.A., *Assistant Director*

Katherine G. Williamson, B.A., *Assistant Director*

Lorenzo C. Canalis, B.S., *Director of Transfer Services*

Josephine C. Chavis, *Coordinator of Information and Communication*

Student Affairs

William J. Loftus, B.A., M.A., Ph.D., *Dean of Students*

Rodger W. Decker, B.A., M.A., Ed.D., *Director of Rehabilitation Services*

W. Robert Martin Jr., B.S., B.D., D.D., *College Pastor and Director of International Programs*

Veronica H. Newman, B.S., M.S., Ph.D., *Director of Career Planning and Placement*

Patsy H. Webb, *Assistant Dean of Students and Director of Housing*

Theiron H. Young, *Chief of Security*

Business Affairs and Administrative Services

Robert A. Coons, B.S., C.P.A., *Controller*

William A. Prosser, B.A., M.A., C.P.A., *Consultant for Business Affairs*

Sue Sims Tanner, B.A., M.Ed., *Director of Financial Aid*

Anne W. Todd, B.A., *Director of College Work-Study and Associate Director of Financial Aid*

Janice B. Whitehead, B.A., *Payroll Officer*

Betty E. Burroughs, *Accounting Administrative Associate*

Kay G. Cavendish, *Controller of Student Accounts*

Lisa H. Ivey, *Cashier*

Deborah C. Shimp, *Accounts Payable*

Harvie C. Jordan Jr., *Business Manager*

Juri P. Kirs, B.A., *Director of Environmental Services*

Steve Tuchten, *Director of Food Services*

Thomas C. Whitlock, B.A., *Director of Administrative Support Center (ASC)*

Aleathia J. Howard, *Administrative Assistant, ASC*

Kimberly G. Liles, *Administrative Assistant, ASC*

External Affairs

Jack W. Powers, B.S., M.S., Ph.D., *Vice President for External Affairs*

Sandra T. Hampton, B.A., *Administrative Assistant*

Kathleen E. Dison, *Office Manager*

Peggy J. Floyd, B.A., *Director of Development*

Dan C. Mohn, B.A., *Director of Development*

Joseph R. Bathanti, B.A., M.A., *Director of Corporate and Foundation Affairs*

Laura F. Horne, B.A., *Director of Prospect Research and Cultivation*

Tami G. Geiger, B.A., *Director of Reunion Gifts and Assistant Director of the Annual Fund*

Minnie S. Hales, *Director of Donor Records*

June E. Milby, B.A., *Director of Communications and Marketing*

Mark S. Powell, B.A., *Communications and Marketing Officer*

Joann Bellavia, B.A., *Publications Assistant*

W. Robert Martin III, B.A., *Director of Alumni Affairs*

Susan M. Wentz, B.A., *Director of Constituent Group Programs*

Board of Trustees, 1987-88

James L. Morgan, Laurel Hill, N.C.
Chair

Lindsay C. Warren Jr., Goldsboro, N.C.
Vice Chair

Mrs. Mary Ruth Mitchell Hardy, Greenville, N.C.
Secretary

Class of 1988

Paul Baldasare Jr., Durham, N.C.
St. Paul L. Epps, Windsor, N.C.
Charles T. Hagan III, Greensboro, N.C.
*Mrs. Mary Ruth Mitchell Hardy, Greenville, N.C.
Samuel R. Hope, Washington, D.C.
Mrs. Mary Williams John, Laurinburg, N.C.
Ms. Ina Ann McCoy, Chapel Hill, N.C.
Richard L. Sommers, Richmond, Va.
Leslie C. Tucker Jr., Belmont, N.C.

Class of 1989

Thomas M. Barnhardt III, Charlotte, N.C.
James W. Crawford Jr., Oxford, N.C.
*Sam P. Douglas Jr., Wilson, N.C.
Thomas E. Gillespie Jr., Georgetown, S.C.
Mrs. Anne Shuford McBryde, Gibson, N.C.
*Charles O. Rivers, Wilson, N.C.
*Lindsay C. Warren Jr., Goldsboro, N.C.
*Andrew G. Williamson, Laurinburg, N.C.

Class of 1990

Robert S. Brewbaker Jr., Richmond, Va.
W. Lamont Brown, Southern Pines, N.C.
Stewart M. Dansby, Birmingham, Ala.
Arthur F. Fogartie, Asheville, N.C.
*William E. Graham Jr., Raleigh, N.C.
Billy S. Howell Jr., Charlotte, N.C.
*James L. Morgan, Laurel Hill, N.C.
S. Pinckney Stowe Jr., Belmont, N.C.

Class of 1991

Mrs. Martha B. Beery, Wilmington, N.C.

Donald W. Curtis, Raleigh, N.C.

*Joseph S. Harvard III, Durham, N.C.

*Mrs. Katherine Belk Morris, Southern Pines, N.C.

John N. Walker, Mt. Olive, N.C.

Mrs. Catherine Parker Waters, Clinton, N.C.

Harrison H. Williamson, Fayetteville, N.C.

***=Member of Executive Committee**

Index

Academic Information	8
Academic Probation	47
Accreditation	3
Administration	192
Admissions	26
Allied Health Major	107
Anthropology Courses	142
Art Major	57
Biology Major	109
Breadth Course Requirement	53
Business and Economics Major	144
Calender	i
Career Planning	21
Chemistry Major	116
Chinese Courses	75
CLEP	27
Computer Science, Emphasis in Major	124
Contract Majors	41
Costs	29
Correspondence Study	50
Course Load	48
Courses of Study	54
Communications Major	62
Curriculum	52
Dean's List	43
Degree Requirements	37
Degrees	8
Dormitories	15
Drama (See Theatre)	
Economics Major	144
Education Programs	152
Elementary Education Major	152
Engineer-Dual Degree	12
English Major	65
Facilities	4
Faculty	184
Fees	29
Financial Aid	33
Fine Arts Major	56
Foreign Languages	74
French Major	74
General Education Program	52
German Courses	77
Grade Report	47
Grading System	44
Greek Courses	78
Gymnasium	5
Health Services	21
History Major	160
History of the College	3
Honor Code	21
Honor Scholarships	35
Honors	41
Humanities and Fine Arts Division	56
Interdisciplinary Majors	40
International Program	11

Library	4
Literature Major	71
Mathematical, Natural, and Health Sciences Division	106
Mathematics Major	124
Mathematics and Computer Science Major	124
Modern Languages Major	74
Motor Vehicles Registration	23
Music Facilities	5
Music Major	80
Philosophy Major	86
Physical Education Major	129
Physical Education Requirements	129
Physically Handicapped (see Rehabilitation Center)	27
Physics Courses	116
Placement Services	28
Politics Major	165
Pre-Law Program	12
Premedical Programs	12
Psychology Major	174
Refunds	33
Registration for Classes	44
Rehabilitation Center	5
Religion Major	92
Residence Halls	15
Scholarships	35
Science Center	5
Social and Behavioral Sciences Division ..	140
Spanish Courses	78
Student Association	22
Student Life	15
Studies Abroad	11
Summer Sessions	13
Summer Work at Other Institutions	50
Teacher Education and Certification	155
Theatre Major	98
Thematic Contract Major	40
Transfer Credits	50
Transfer Students	27
Trustees	195
Tuition	29
Varsity Athletics	137
Winter Term	9
Withdrawal from College	49
Withdrawal from Course	46

Directory of Correspondance

St. Andrews Presbyterian College
Laurinburg, North Carolina 28352
(919) 276-3652

General Information, Publications

Director of Communications

Admissions

Director of Admissions

Financial Aid, Scholarships

Director of Financial Aid

Business Matters

Controllor

Student Activities, Residence Halls

Dean of Students

Courses of Instruction, Academic Matters

Dean of the College

Transcripts, Records of Students

Office of the Registrar

Employment of Students and Alumni

Director of Career Planning and Placement Services

Alumni Affairs

Director of Alumni Affairs

Gifts and Bequests

Director of Development

Summer School

Associate Dean for Academic Affairs

Continuing Education

Director of Continuing Education

Visitors to the campus are welcome. The offices of the College are open from 9 a.m. to 5 p.m. Monday through Friday. Appointments in the Office of Admissions are scheduled from 9 a.m. to 4 p.m. weekdays and on Saturday mornings.



Photo Credits

Rooney L. Coffman and St. Andrews Presbyterian College Staff — pp. i, iv, 1, 6, 7, 10, 16, 17, 18, 19, 24, 28, 41, 43, 47, 52, 57, 71, 80, 98, 109, 116, 124, 129, 137, 142, 152, 160, 165, 177, 183, 200.

Spruill and Company — pp. 25, 30, 34, 38, 55, 62, 65, 74, 86, 92, 105, 139, 144.

Title page photo by Rooney L. Coffman.

